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FIG. 1a

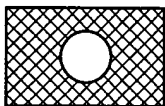


FIG. 1b



F

FIG. 1c

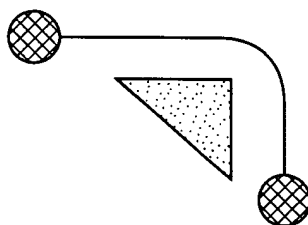


FIG. 1d



FIG. 1e

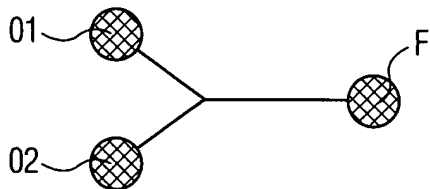


FIG. 1f

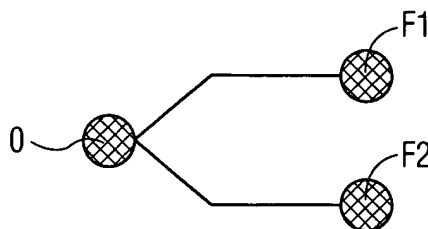


FIG. 1g



FIG. 1h

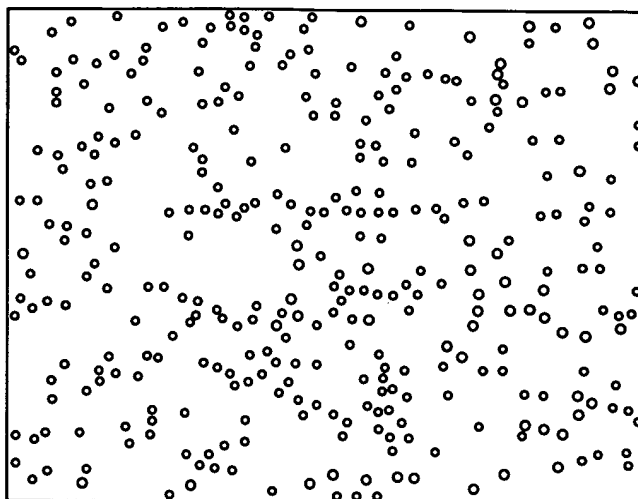
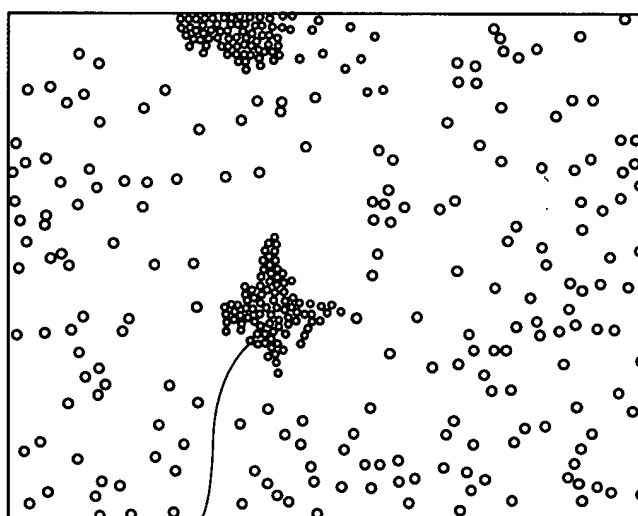


FIG. 2A



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FIG. 2B

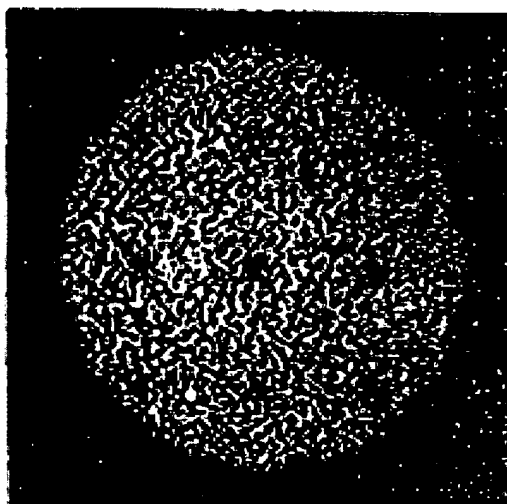


FIG. 2C

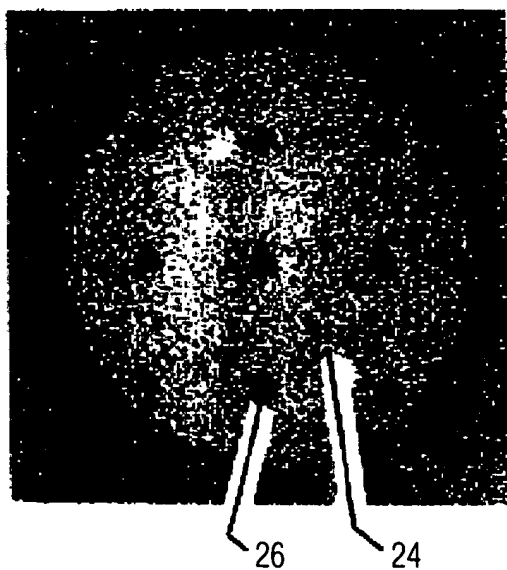


FIG. 2D

BEST AVAILABLE COPY

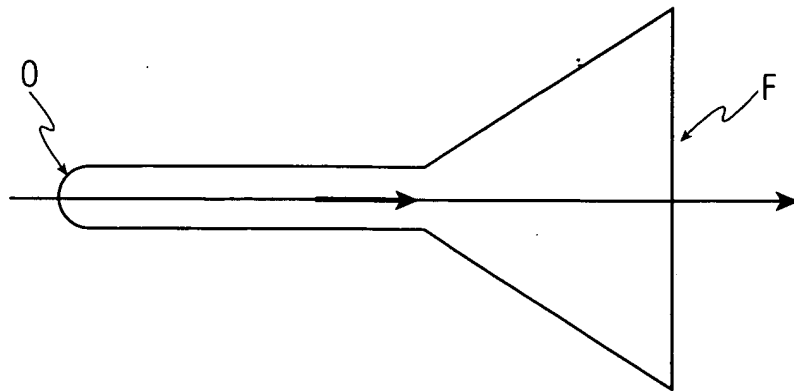


FIG. 3a

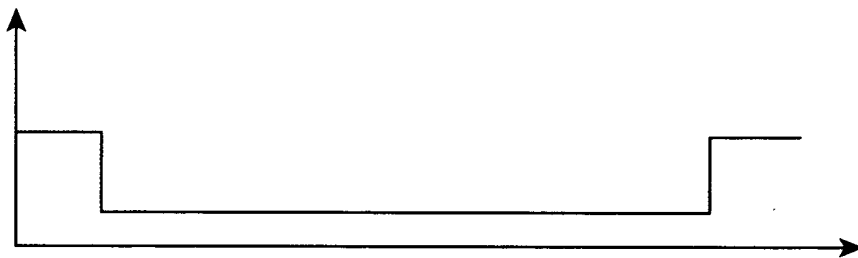


FIG. 3b

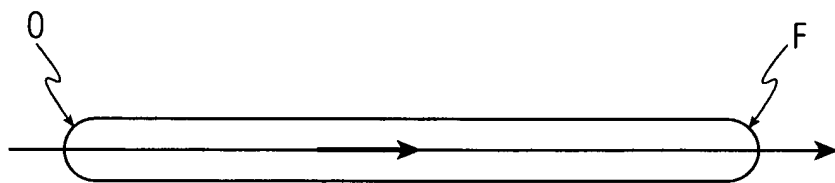


FIG. 3c

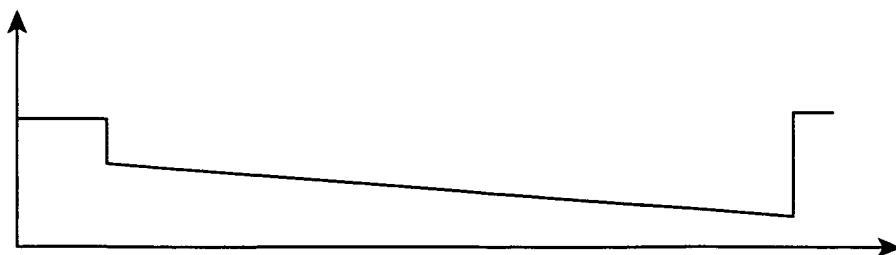


FIG. 3d

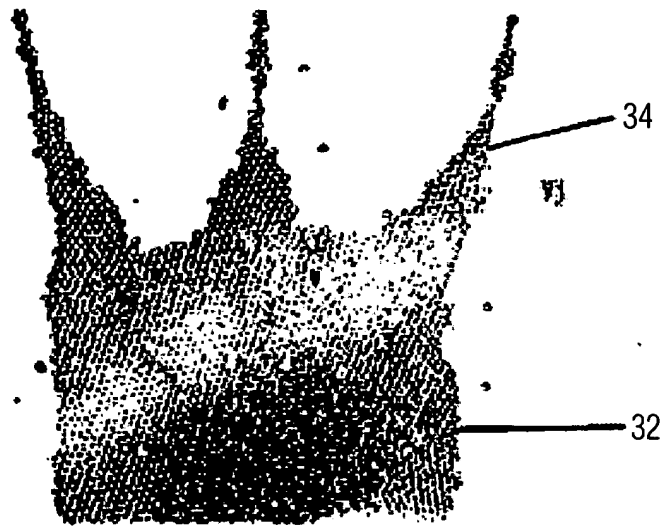


FIG. 3c

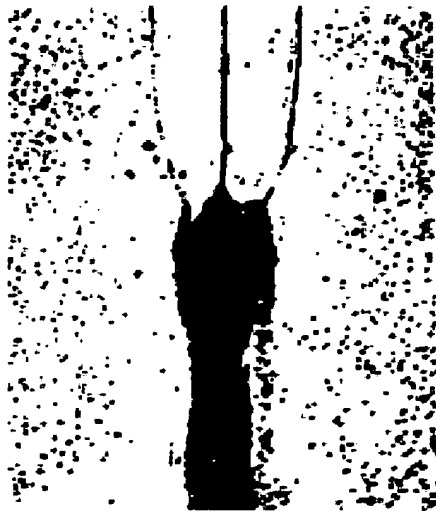


FIG. 3d

BEST AVAILABLE COPY

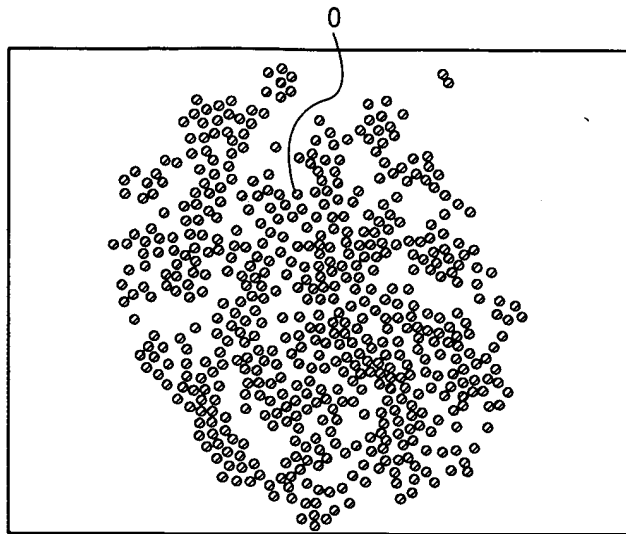


FIG. 4A

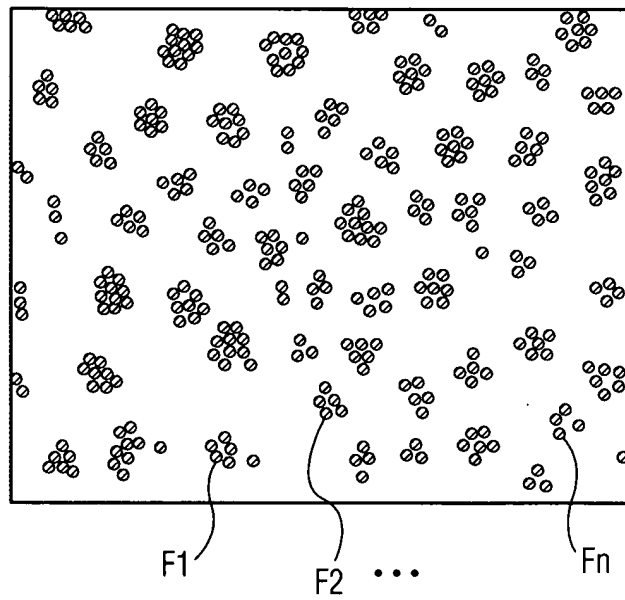


FIG. 4B

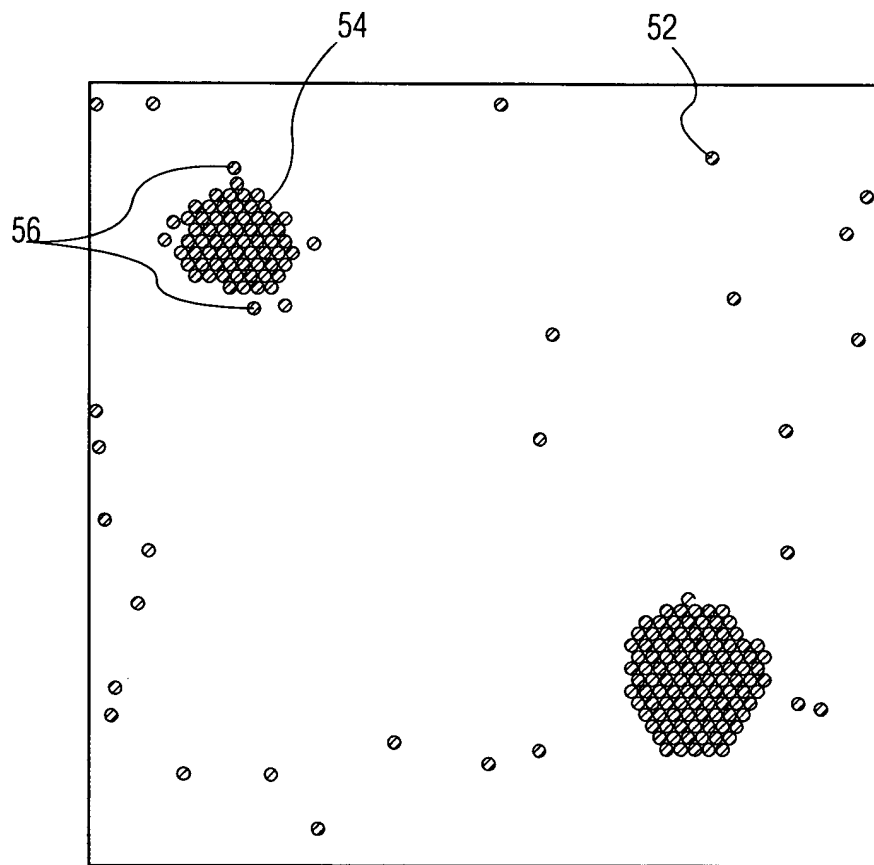


FIG. 5

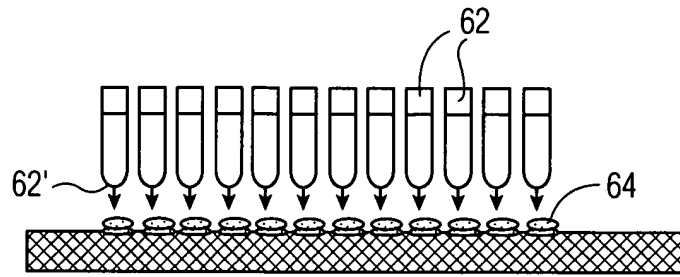


FIG. 6a

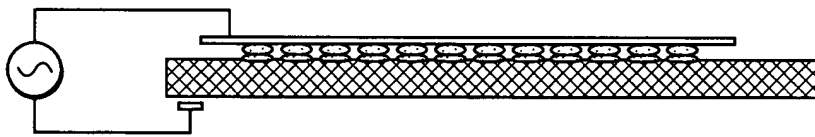


FIG. 6b

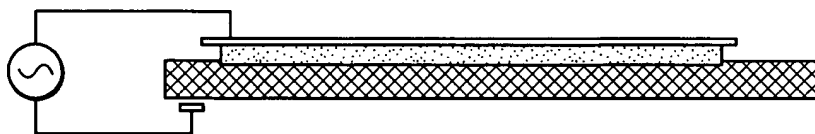


FIG. 6c



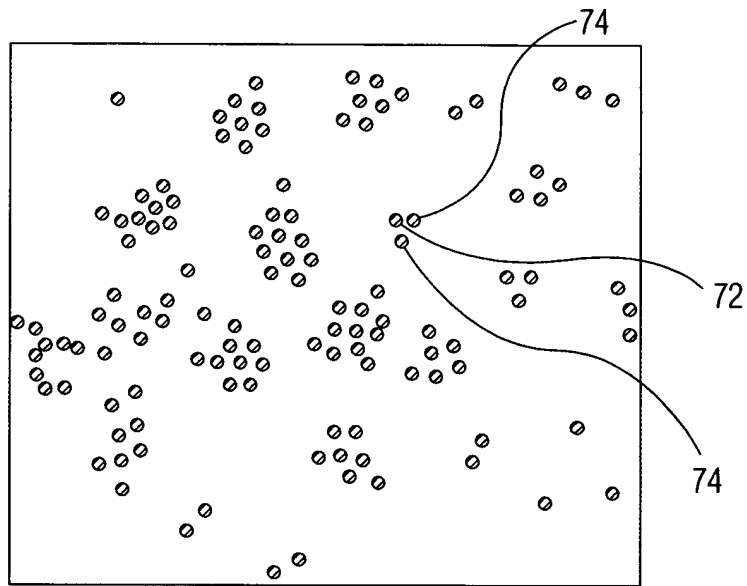


FIG. 7

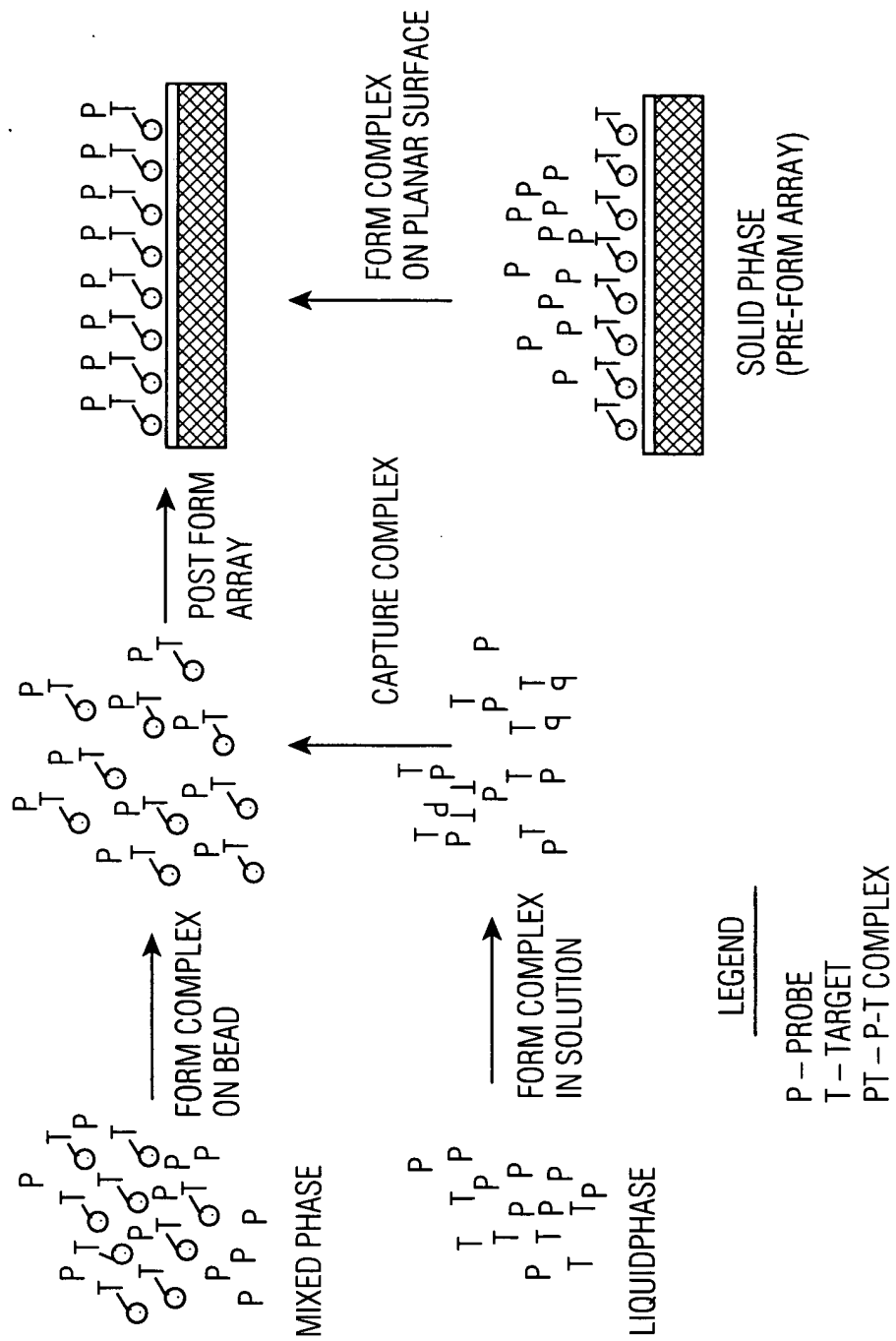


FIG. 8

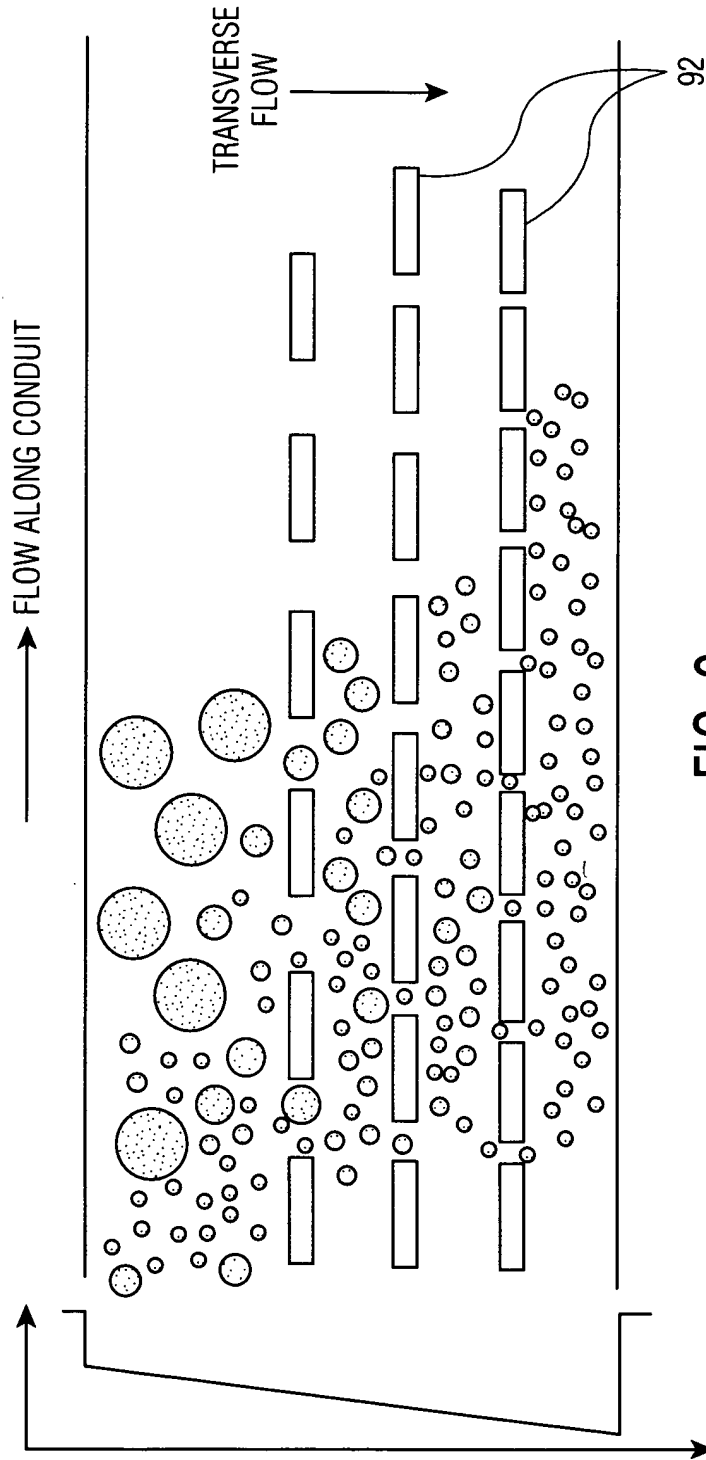


FIG. 9a

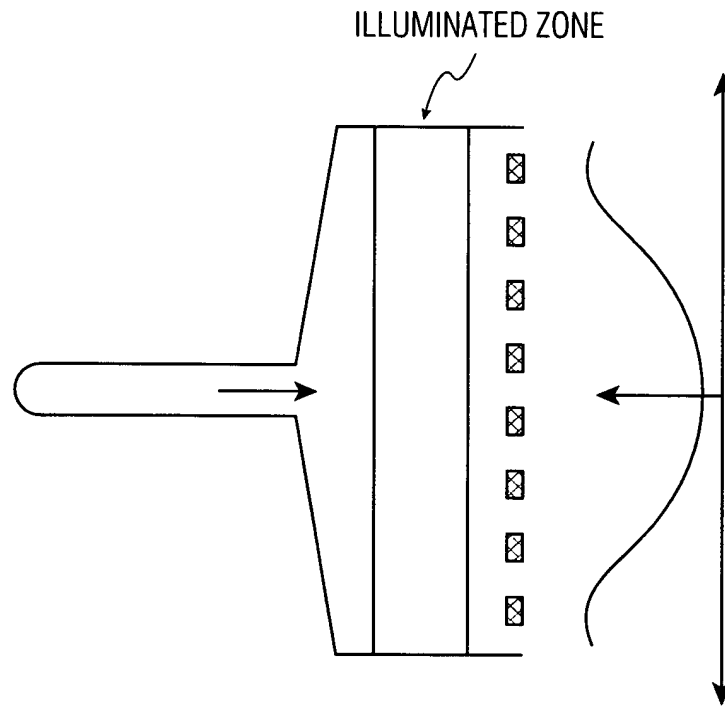


FIG. 9b

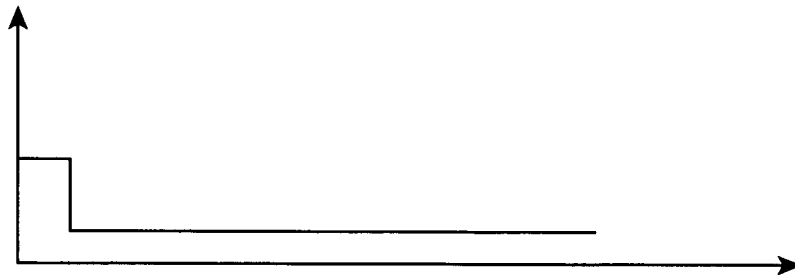


FIG. 9c

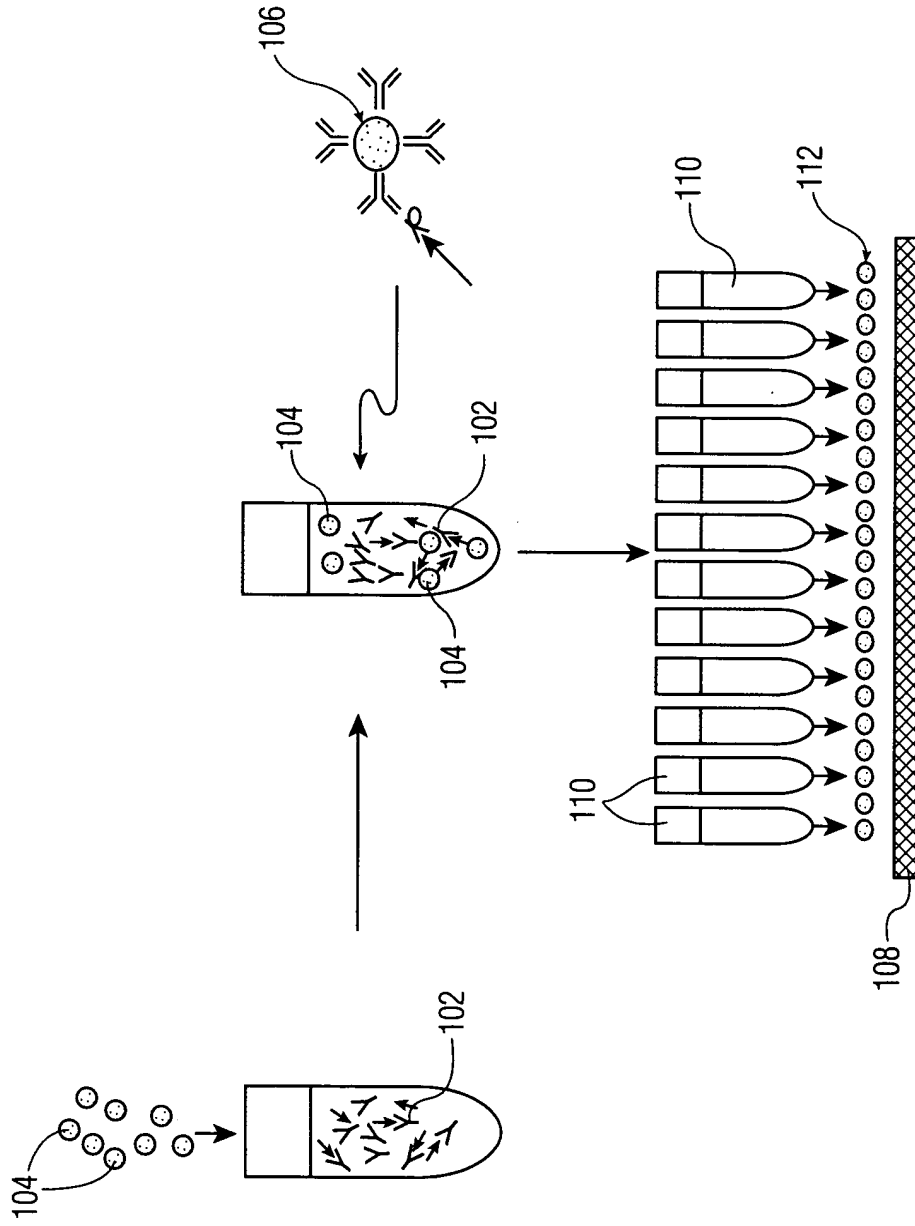


FIG. 10



LOCAL FLUID VELOCITY

FIG. 11a

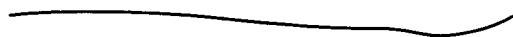


FIG. 11b

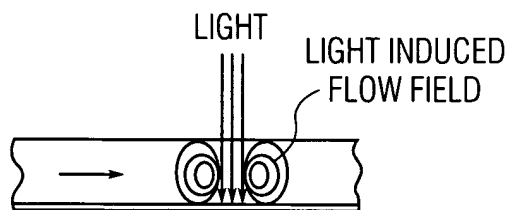


FIG. 11c

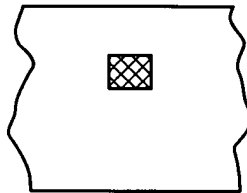


FIG. 11d

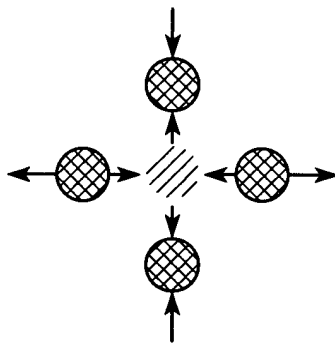


FIG. 11e

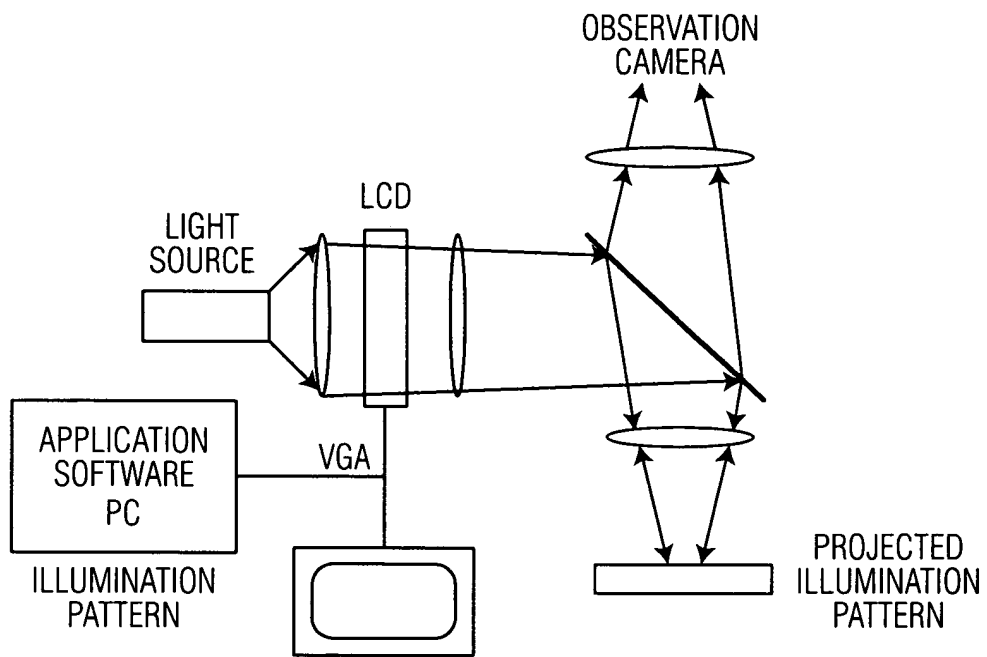


FIG. 12  
PRIOR ART



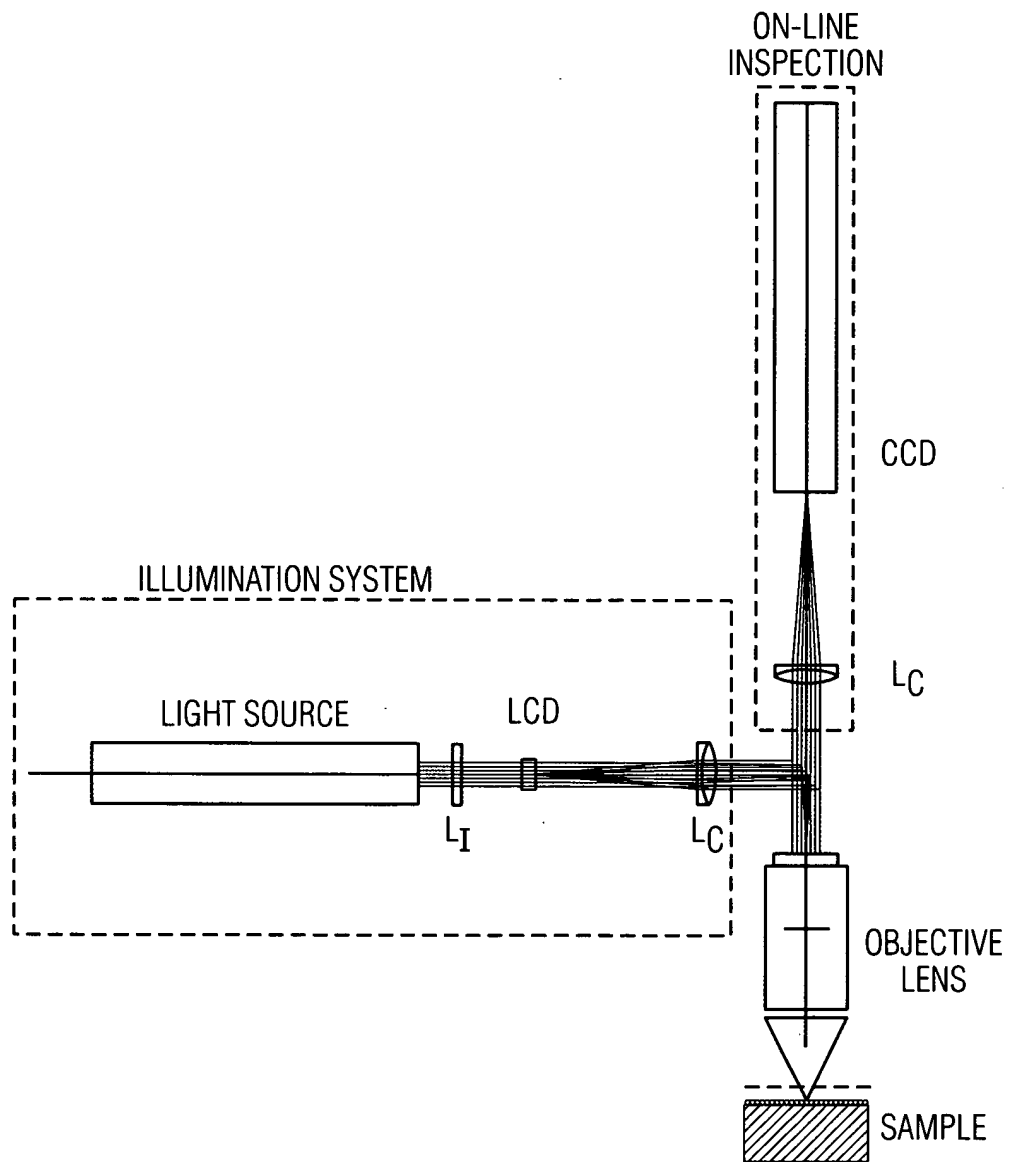


FIG. 13

FIG. 14a

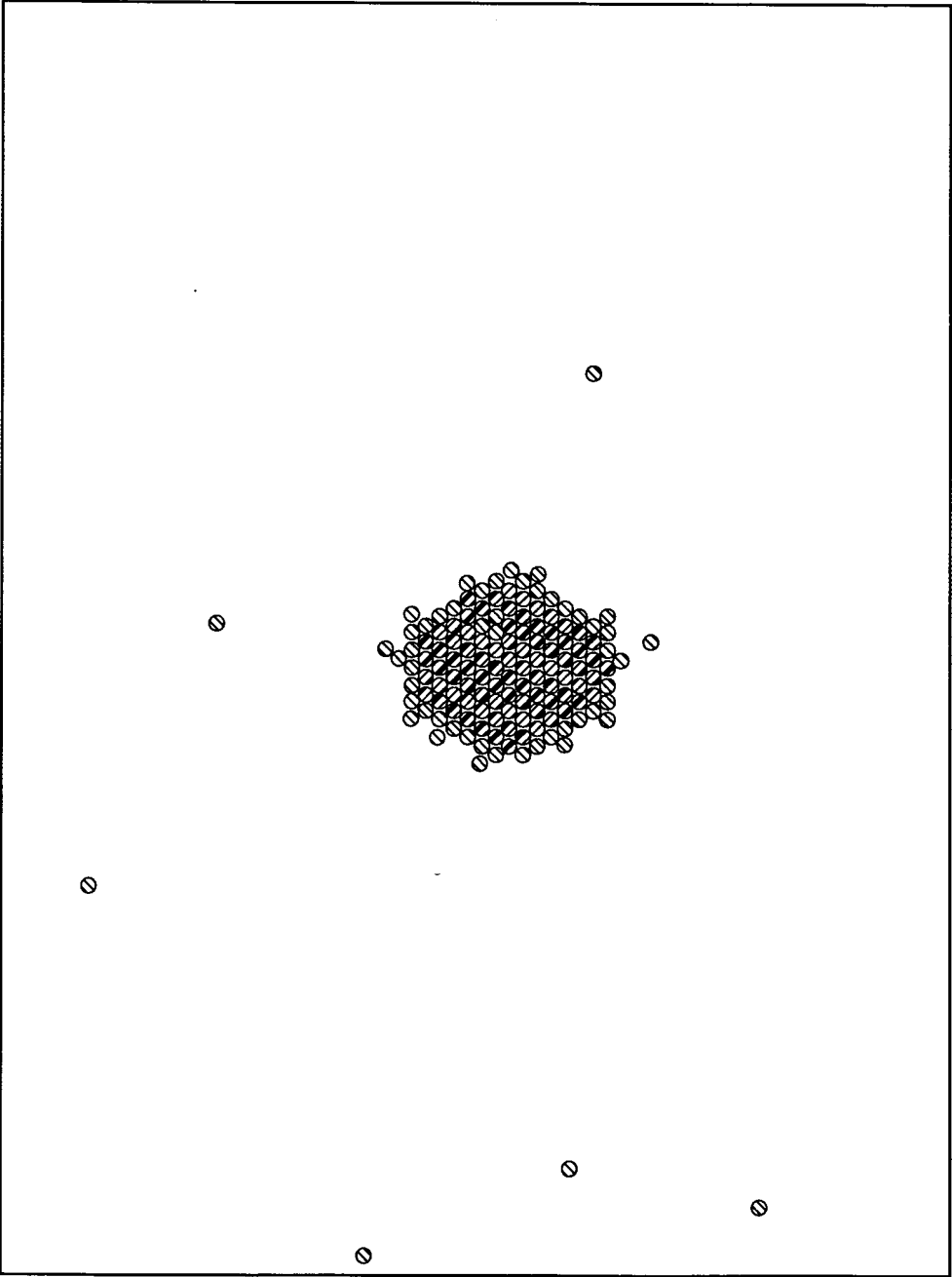


FIG. 14b

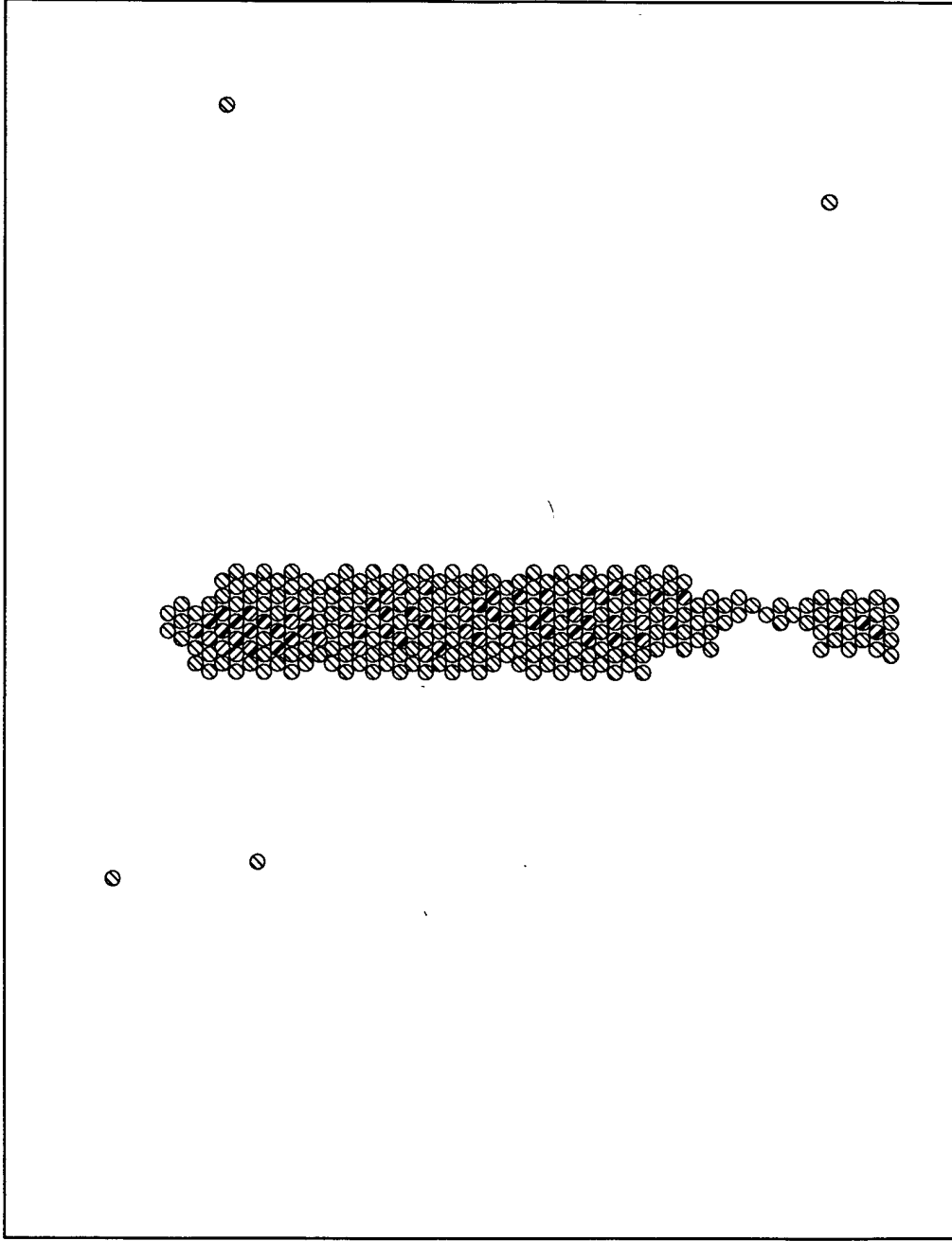


FIG. 14c

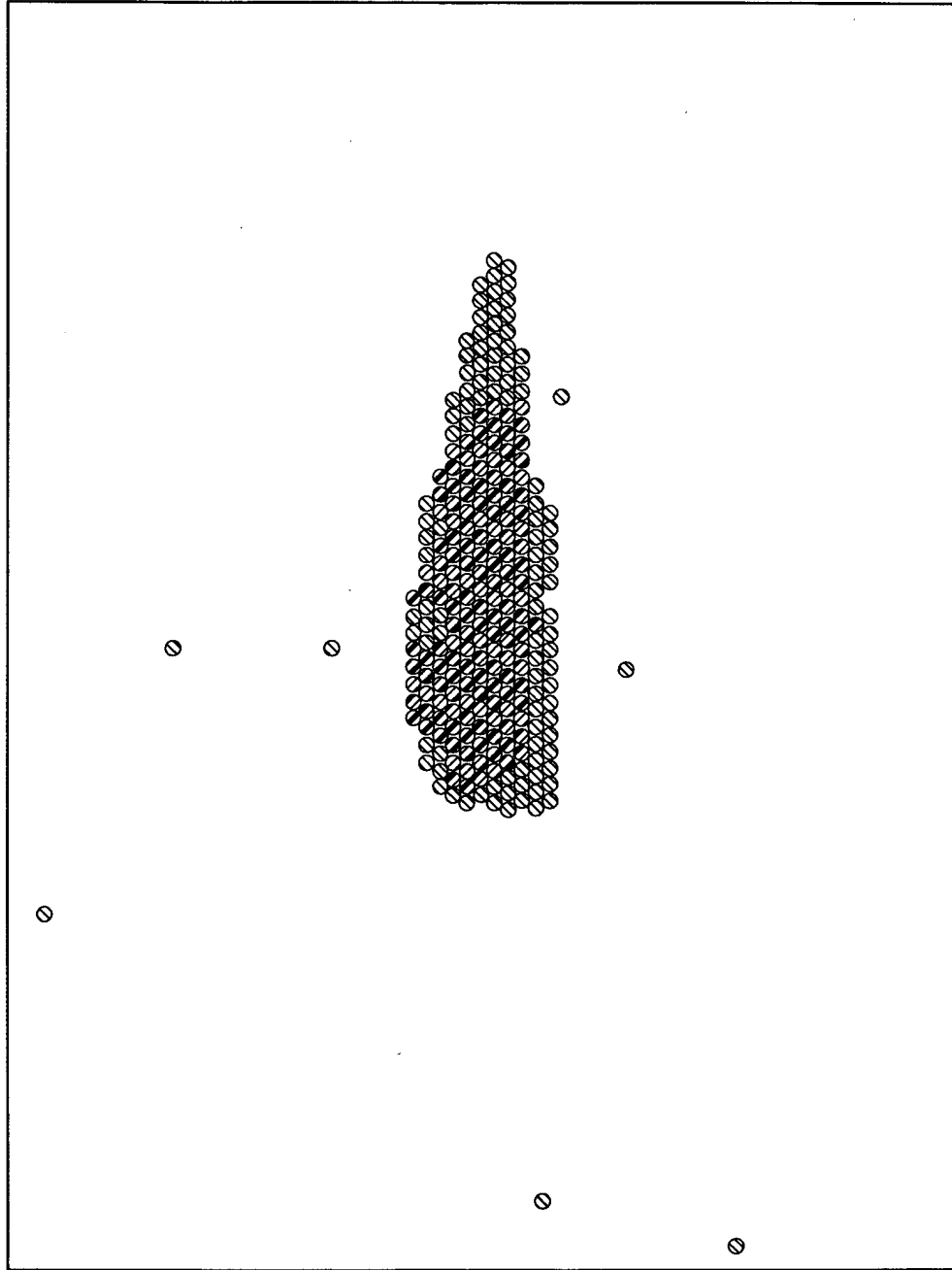
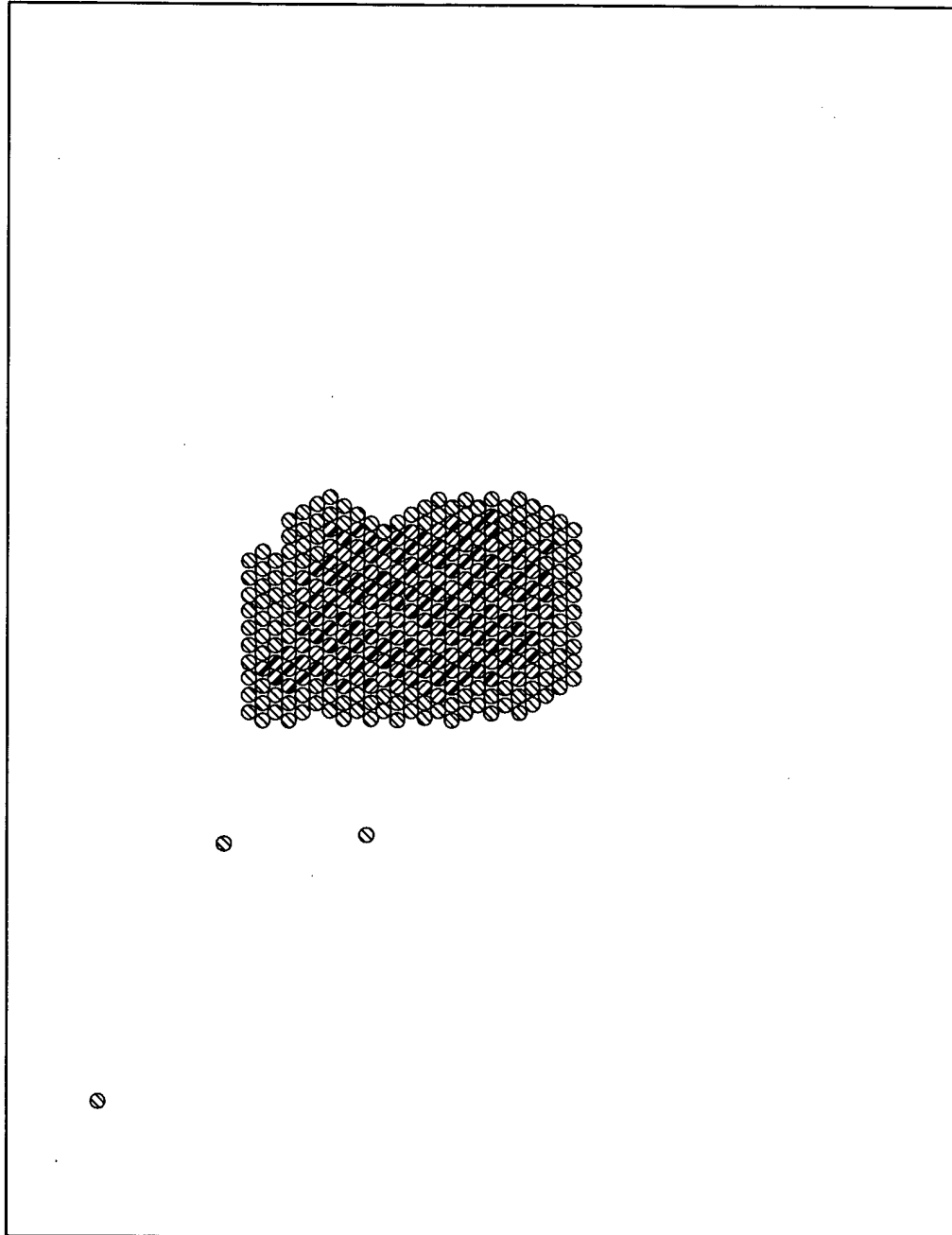


FIG. 14d



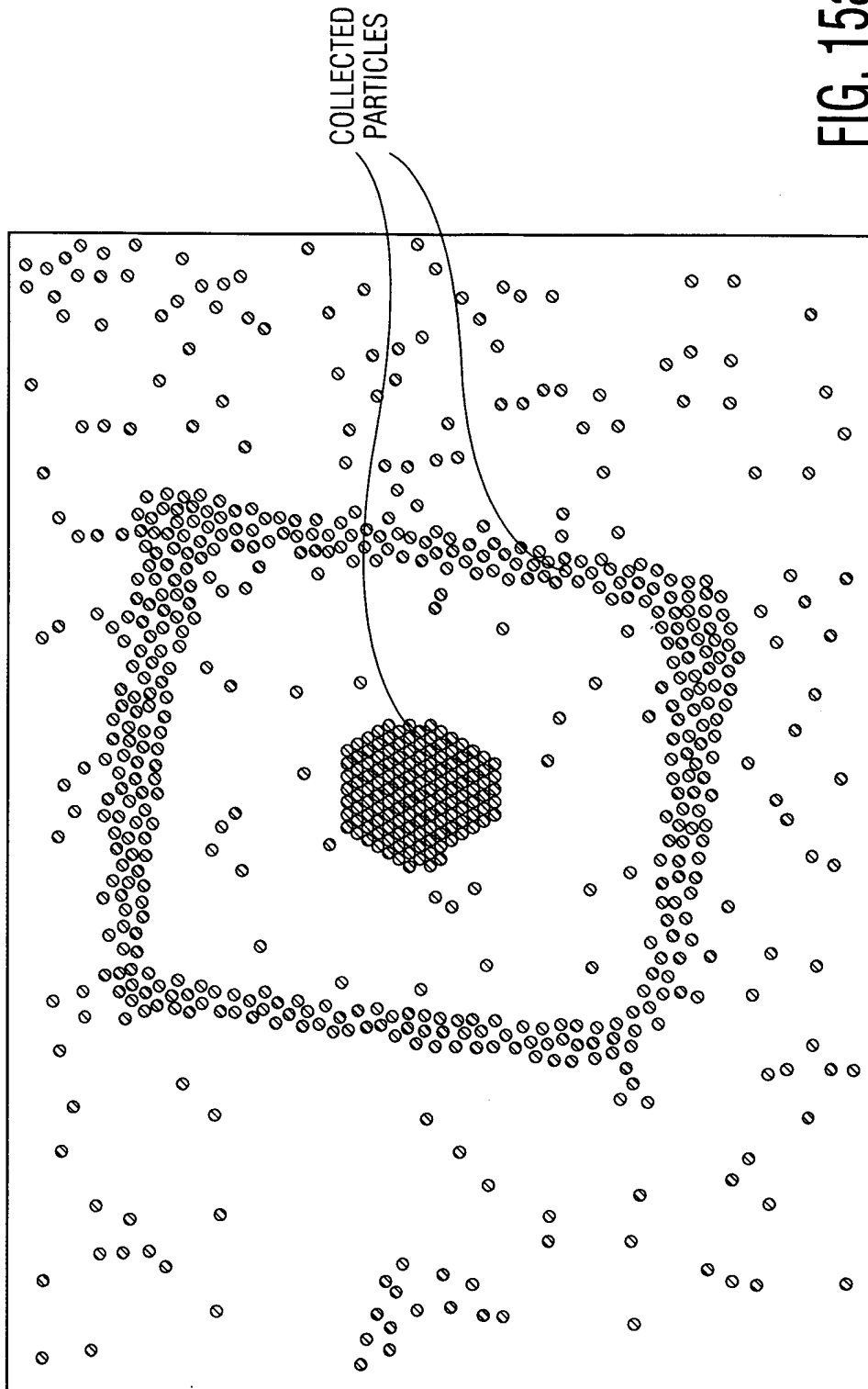


FIG. 15a

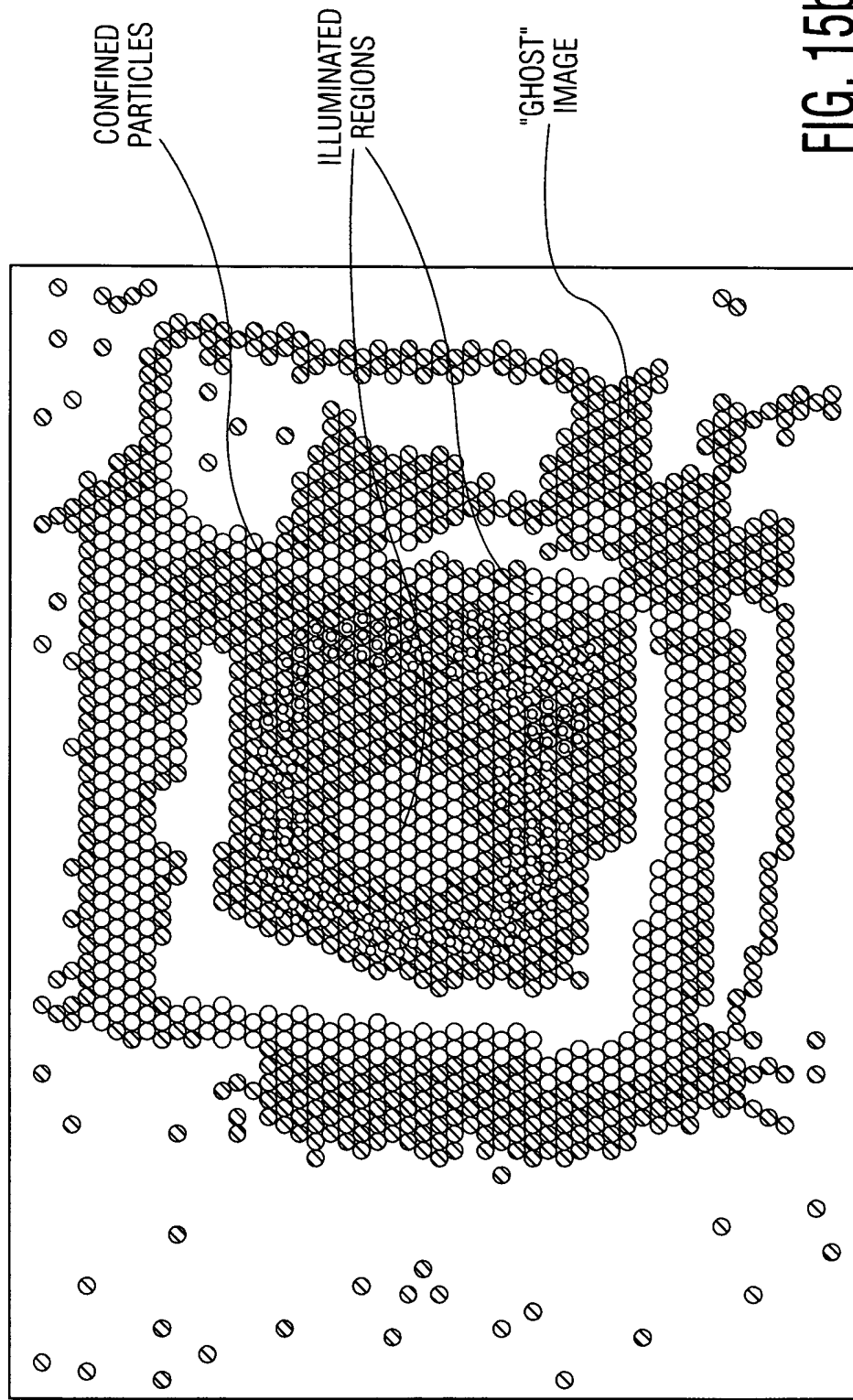
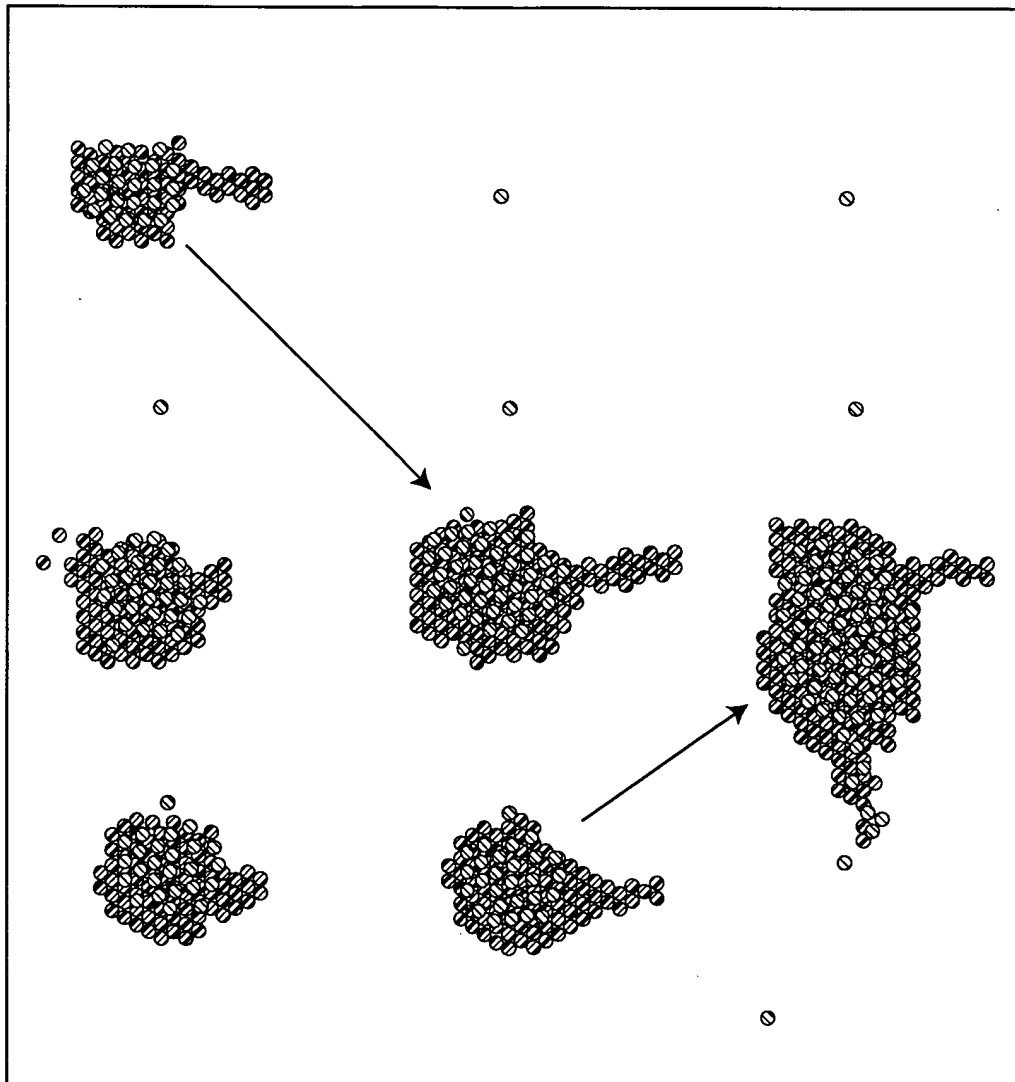
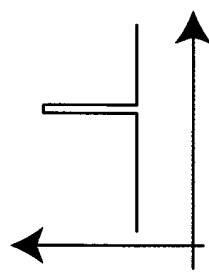


FIG. 15b

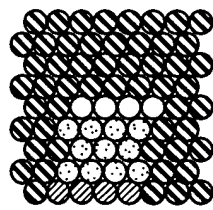
FIG. 16



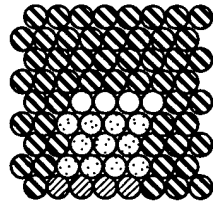




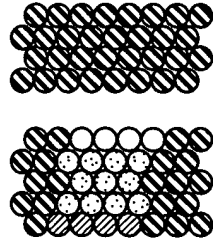
ILLUMINATION PROFILE



DYNAMIC BEAD  
ARRAY WITH  
LABELED SUBARRAY



ILLUMINATION  
OF SUBARRAY  
BOUNDARY



ARRAY  
SEGMENTATION

FIG. 17

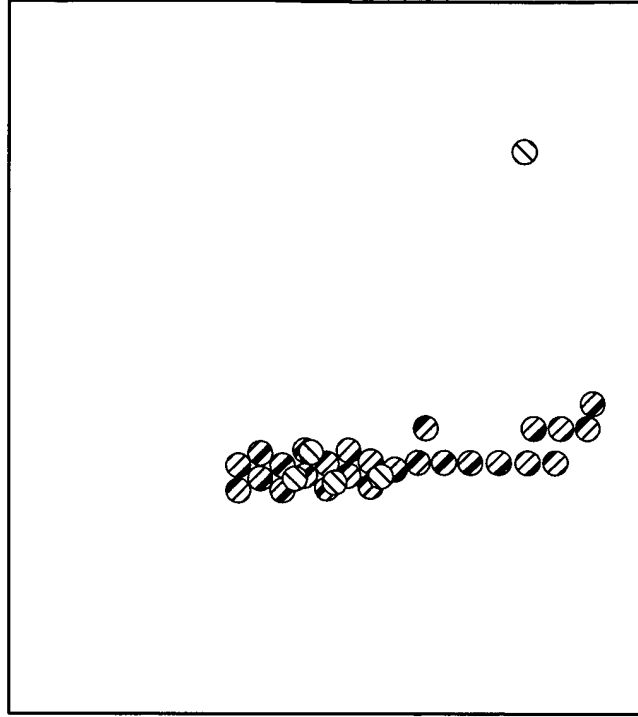


FIG. 18b

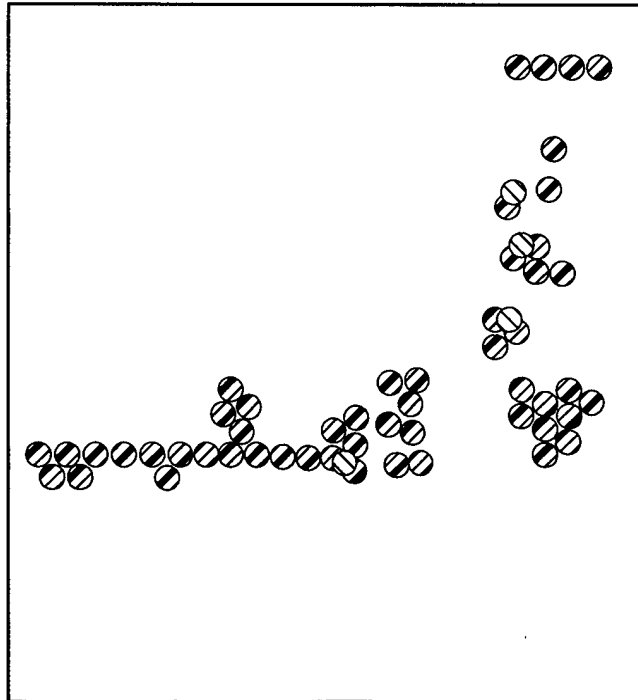
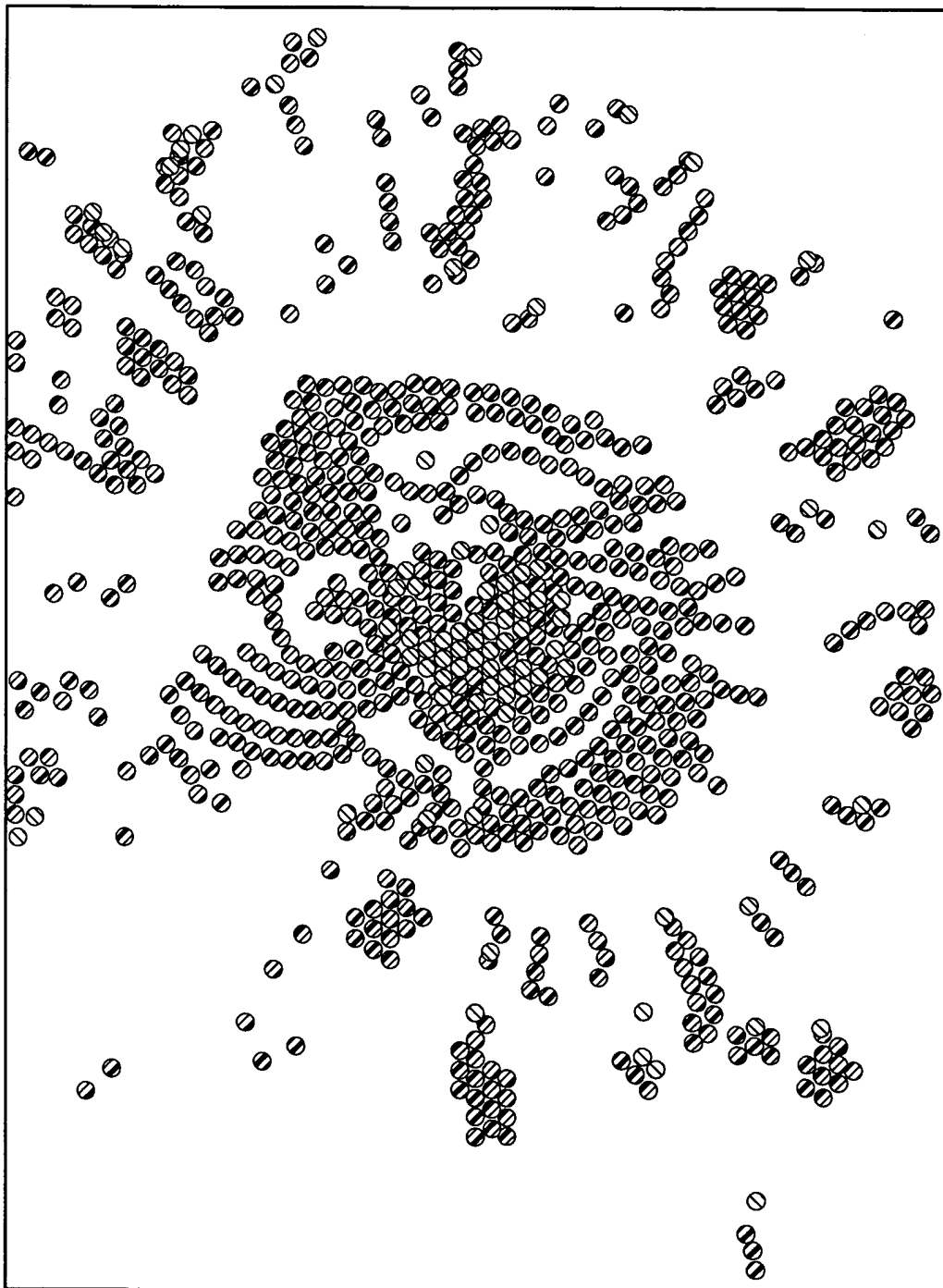
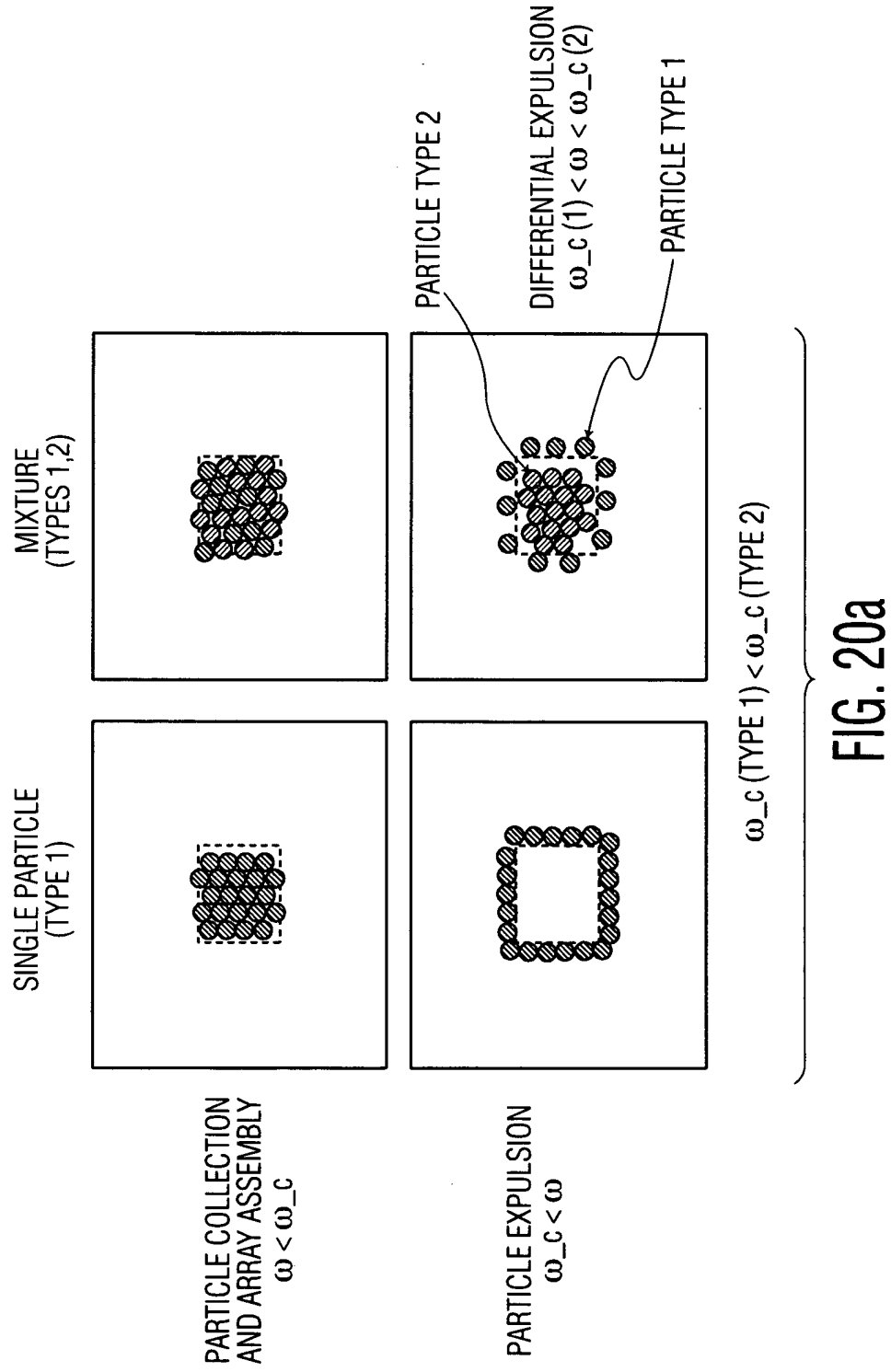


FIG. 18a

FIG. 19





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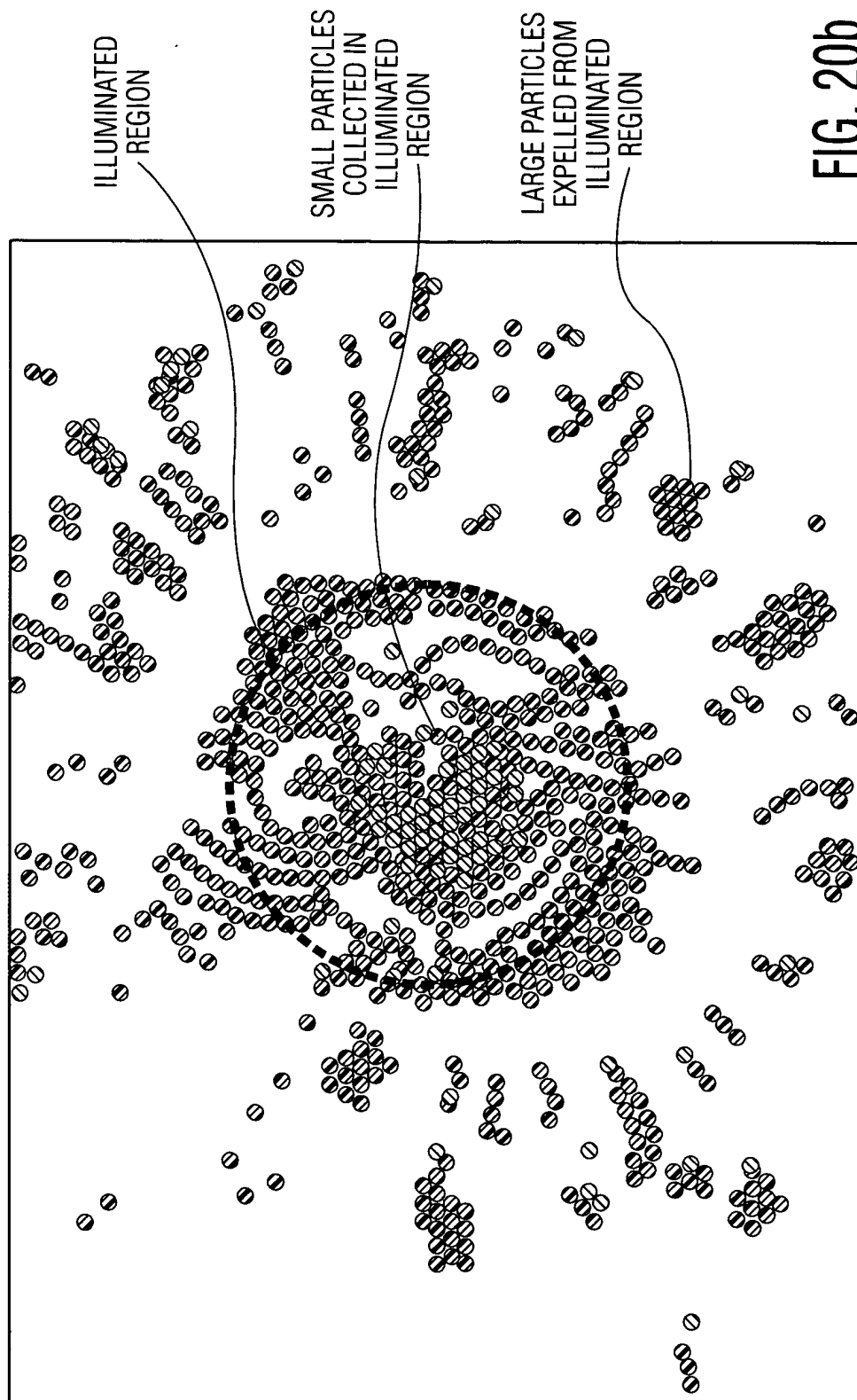


FIG. 20b

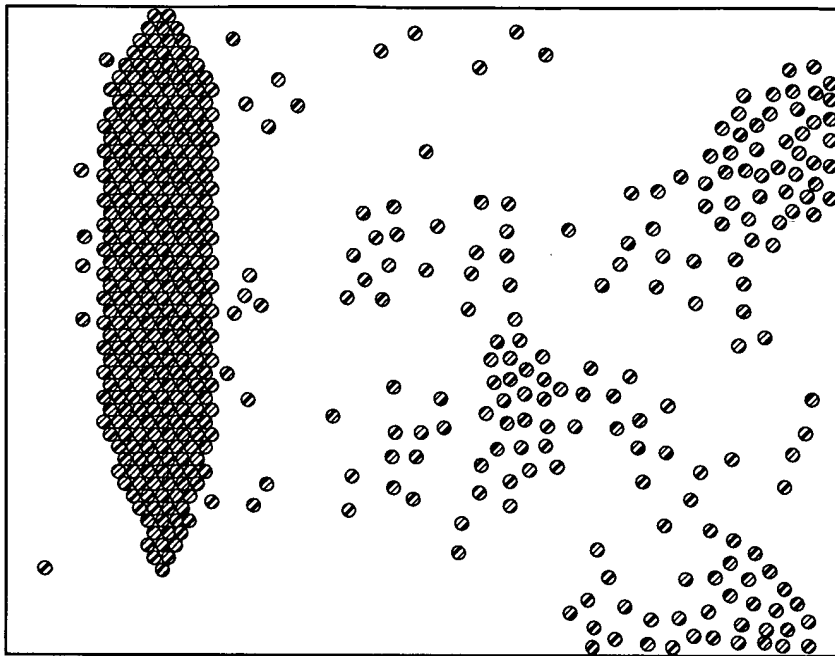


FIG. 21a

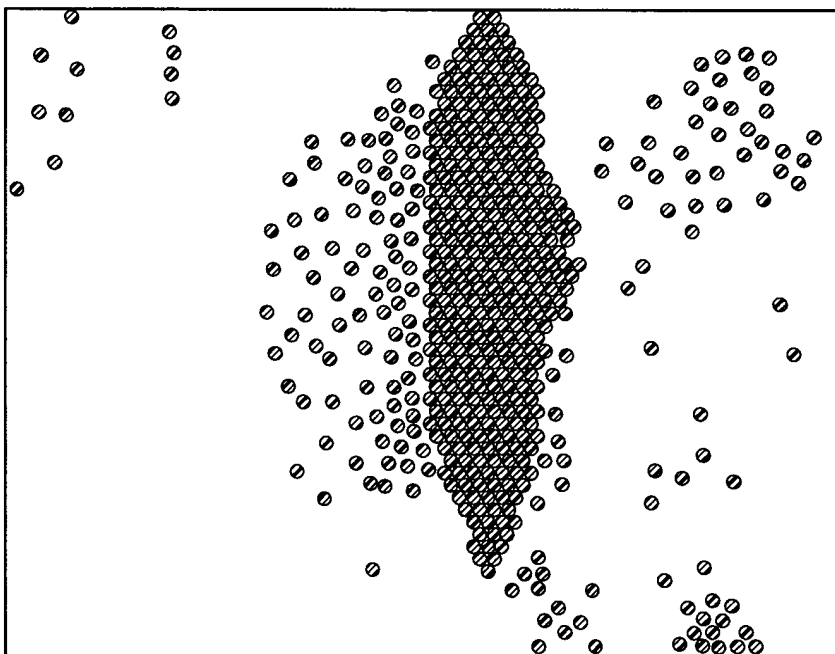


FIG. 21b

## ENCODING METHODOLOGIES

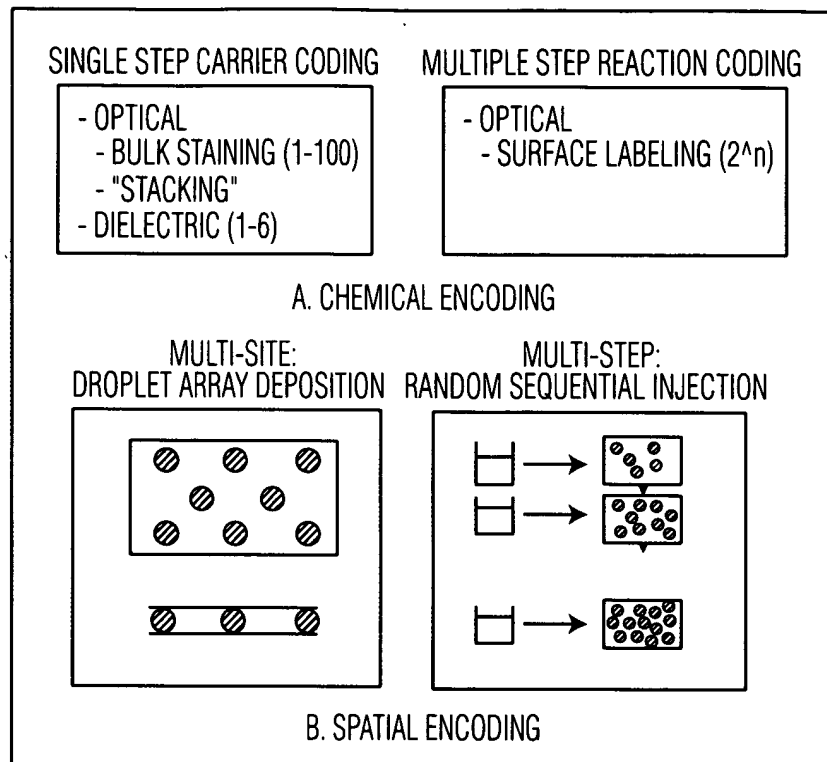


FIG. 22a

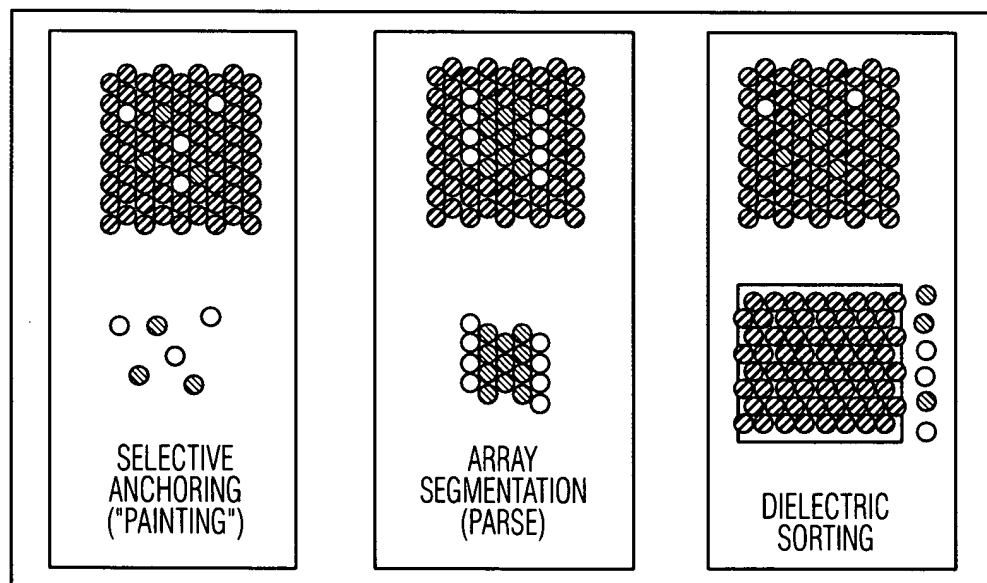


FIG. 22b

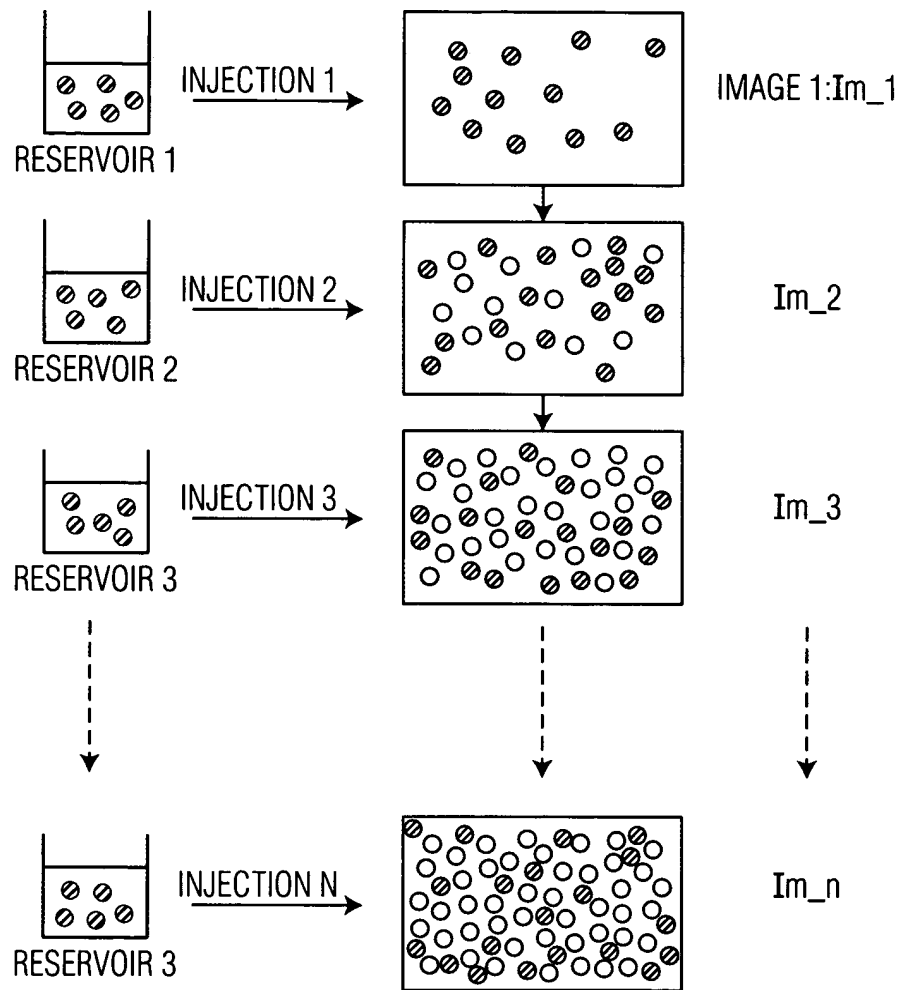


FIG. 23



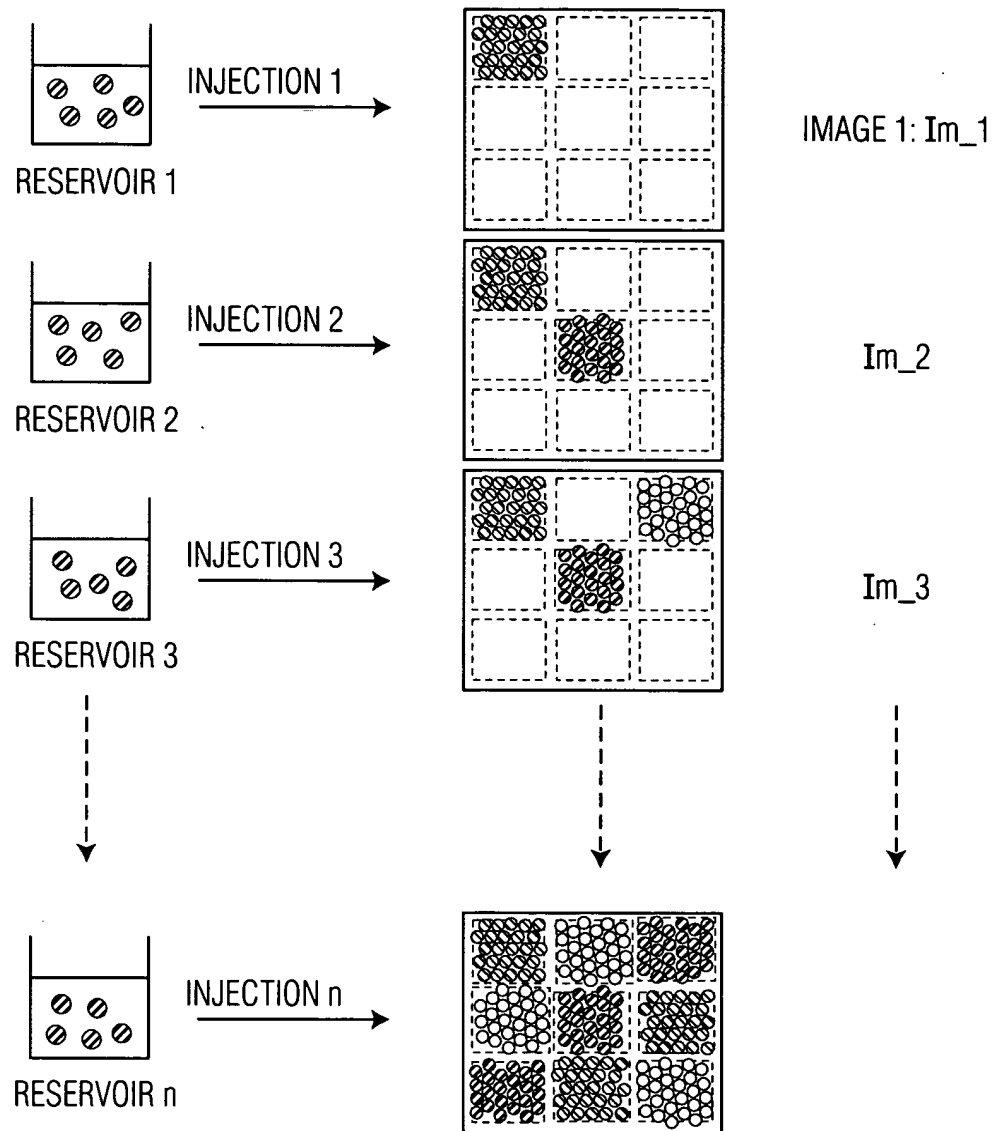


FIG. 24

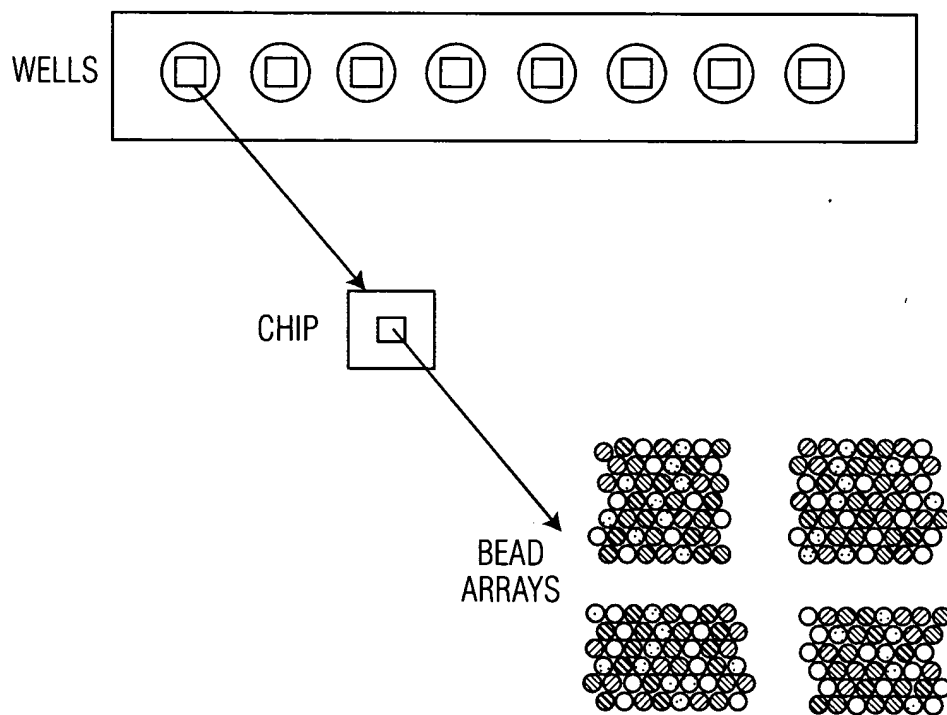


FIG. 25a

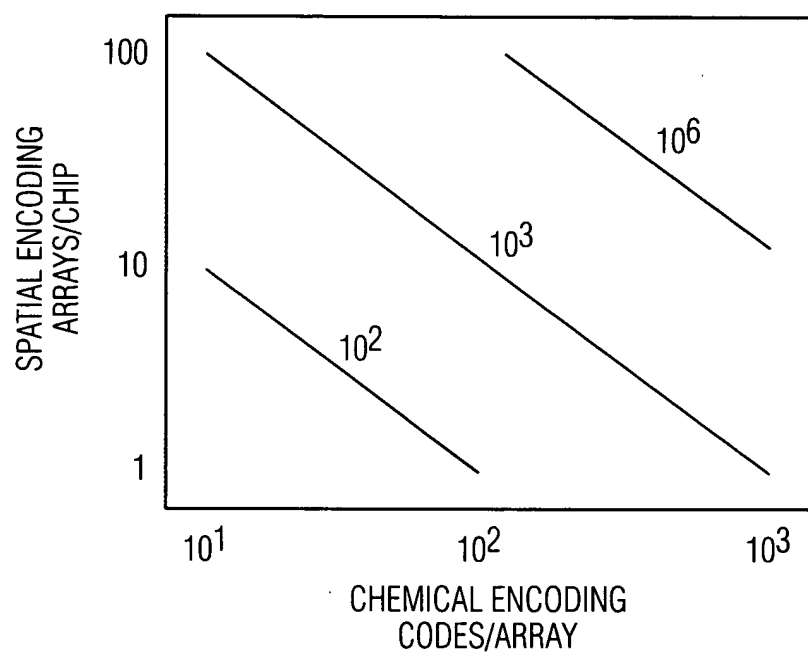


FIG. 25b

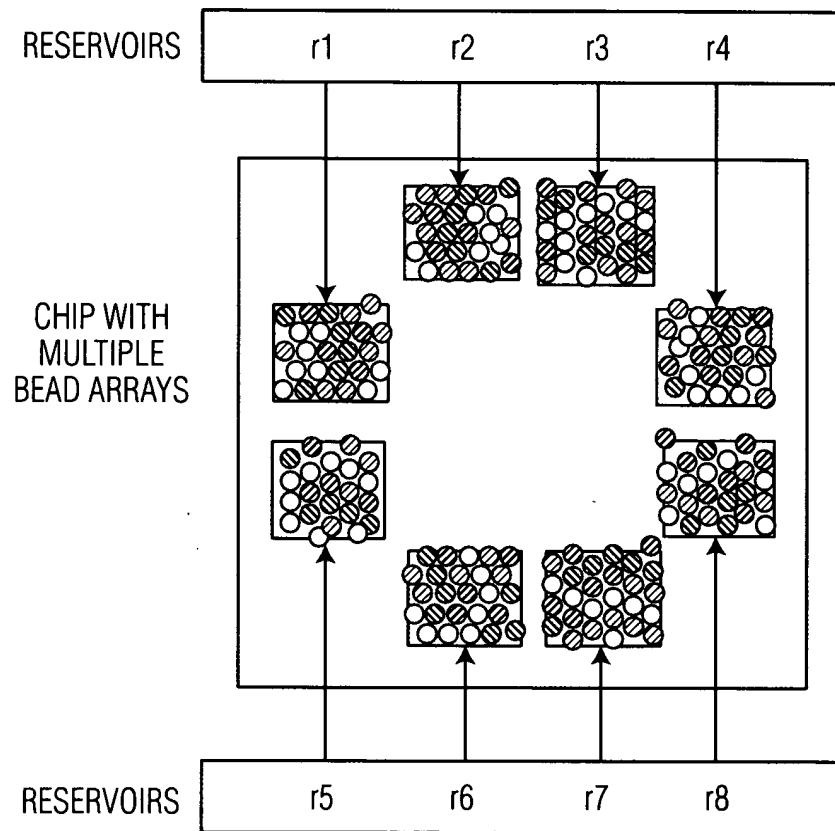


FIG. 25c

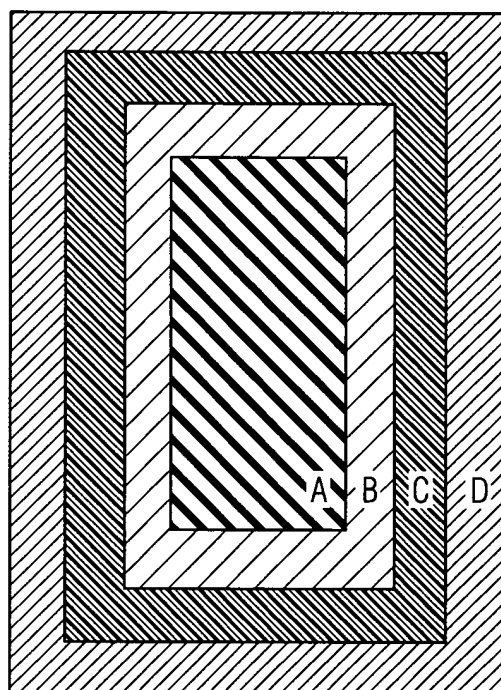


FIG. 26a

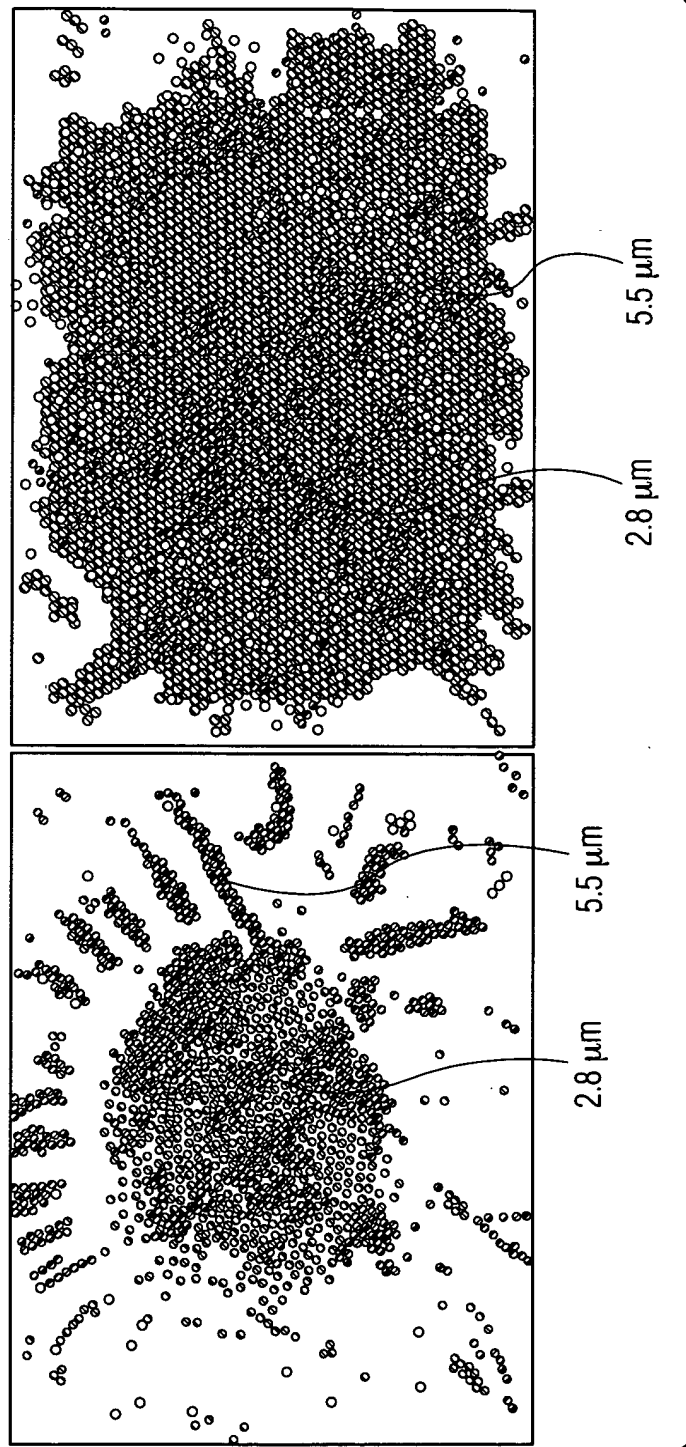
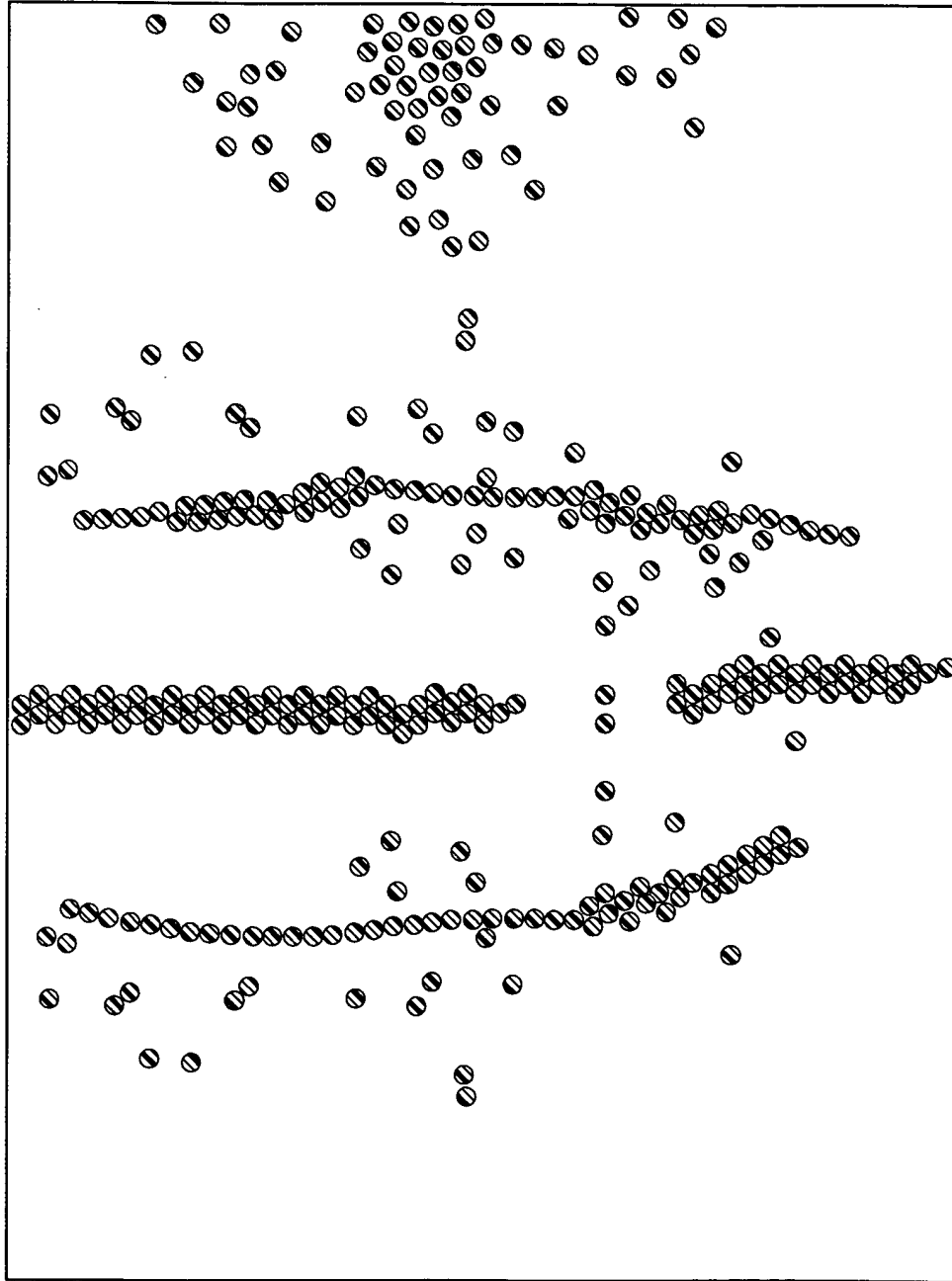


FIG. 26b

BEST AVAILABLE COPY

FIG. 27



REST AVAILABLE COPY

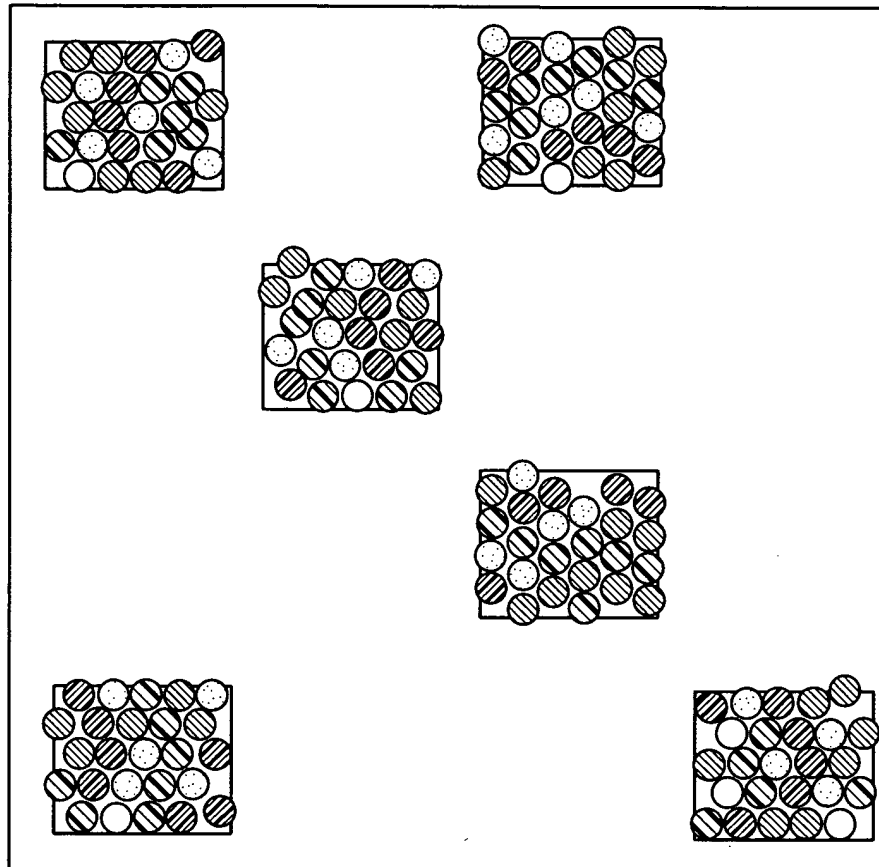
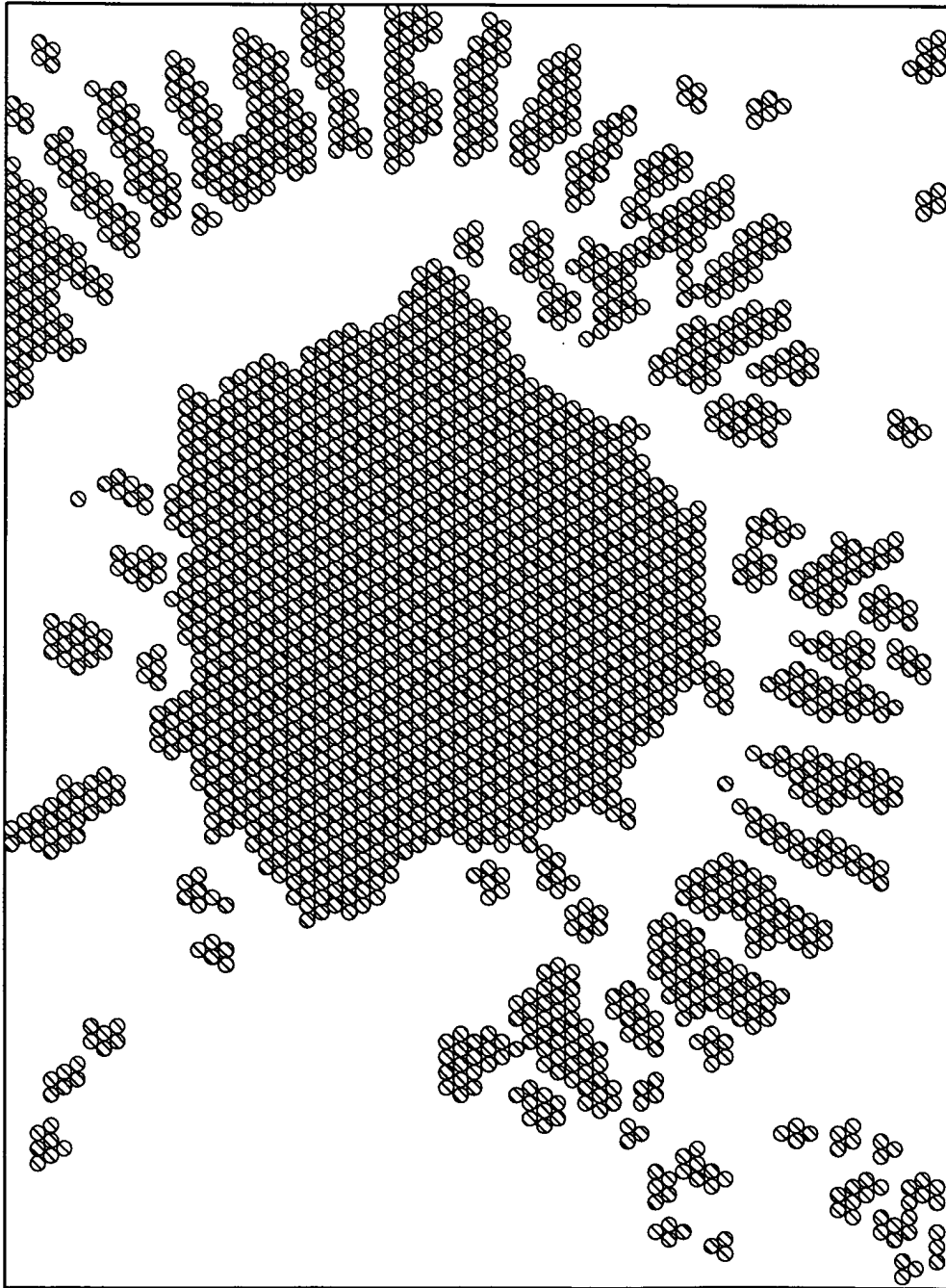


FIG. 28



FIG. 29



BEST AVAILABLE COPY